INTEGRATED EXECUTIVE SUMMARY

Report of Consultations on a Results-Based Forest and Range Practices Regime for British Columbia

July 25, 2002

Prepared by

Dr. George Hoberg
Professor and Head
Department of Forest Resources Management
University of British Columbia

In its New Era document, the Government of British Columbia promised to "Streamline the Forest Practices Code to establish a workable, results-based Code, with tough penalties for non-compliance." The government introduced a discussion paper, *A Results-Based Forest and Range Practices Regime for British Columbia,* on May 1, 2002. The government established a three-part public consultation process:

- A panel of Members of the Legislative Assembly, chaired by North Island MLA Rod Visser;
- A more technical, stakeholder process directed by George Hoberg, Head of the Department of Forest Resources Management at UBC; and,
- A web-based public comment forum, managed by Professor Hoberg.

The public comment period ran from May 1 to June 30, 2002.

This integrated executive summary draws together the main themes of all streams of the consultation process, organized around the objectives the government set for itself when it introduced its proposal. It also provides recommendations.

The discussion paper lays out the government's eight objectives guiding the proposal:

- reducing the transactional and operational costs to industry;
- reducing the Code's complexity;
- providing the forest industry "freedom to manage" in delivery of defined results;
- maintaining the Code's high environmental standards;
- continuing to balance social, environmental and economic interests;
- maintaining and enhancing the level of public acceptance of forest management;
- consistency with the resource capacity of government; and,
- strengthening the compliance and enforcement regime.

The discussion paper attracted a significant amount of comment. The MLA panel held 13 full day meetings in locations throughout the province, hearing approximately 250 oral presentations. The stakeholder process included meetings with 58 groups and individuals, and 133 written submissions. The discussion forum on the website attracted 170 registered users, and 272 entries were posted.

All streams of the public consultation process revealed that there is quite a high level of discontent about the proposal for a results-based code laid out in the discussion paper. For the most part, there is little agreement across different categories of stakeholders about why the proposal is flawed. For example, industry groups and some community groups are sharply critical of the proposal because they believe it still contains too many prescriptive rules, and they do not believe it will reduce their costs. Environmental groups, First Nations, and some community groups are also sharply critical, but for the opposite reason. They believe the proposal weakens environmental standards and gives too much control to the industry. Woodlot owners, trappers, ranchers, and recreationalists also were strongly critical.

Objective 1: **Reducing the transactional and operational costs to industry**

There is a clear consensus among industry that this objective has not been met. Many industry representatives stated that the results-based code proposal would not reduce costs, and when combined with other changes to forest policy in the province, it would likely lead to increased costs. The simplification of legal planning requirements does arguably reduce transaction costs, but there was little acknowledgment by industry that this objective was met.

It may have been unreasonable to believe that a new results-based code could significantly reduce industry costs without compromising environmental standards. While we know too little about the costs of the Code, the planning and administration aspects of the Code – which a shift to a results-based framework would presumably address – have never been a significant cost driver for industry.

Special concerns about the costs of planning were raised by small licensees, particularly woodlot. The proposed results-based code does provide for special treatment of woodlots, but representatives of woodlot licensees believe the system is still unworkable for their special needs.

Recommendations

The government should work with industry to perform an analysis of the cost implications of the proposed results-based code, and create an efficient and effective system for monitoring the costs of implementing the results-based code.

The government should consider creating a more distinctive regulatory regime for woodlots to account for their unique character.

Objective 2: **Reducing the Code's complexity**

The proposed results-based code would reduce the complexity of the regulatory framework. When the Code was introduced in 1995 there were, according to government figures, approximately 1245 regulatory requirements (in terms of number of planning requirements, rules and results that needed to be met). The "streamlining the Code" initiative of the late 1990s reduced that number to about 1050. The government estimates that the proposed results-based code would significantly reduce the number of regulatory requirements to about 332 – a 70% reduction from the existing Code.

Perhaps the biggest change is in planning requirements. The existing Code requires licensees to prepare, for government approval, a Forest Development Plan and various site plans. The proposed results-based code only requires submission and approval of a Resource Development Permit, and removes requirements for site plans.

The Forest Practices Code had provisions (until very recently) for joint approval of Forest Development Plans, and still requires joint decisions for some exemptions. The proposed results-based code would provide for a single statutory decision maker for all such approvals and decisions.

Industry believes the proposed framework is still too complex. Industry is very concerned about the overlapping and uncertain relationships between the three agencies involved in implementing the results-based code. While joint decision-making would be eliminated, new elements of complexity are created by introducing a third agency, and by not making the allocation of responsibilities, and mechanisms for coordination, among the three agencies clear. The proposed changes in the planning framework have created considerable uncertainty for industry, creating anxieties about requirements and responsibilities, and tempering the perception that the proposal embodies a significant reduction in complexity.

Recommendations

The government should consider simplifying its organizational arrangements for delivering the results-based code and, at a minimum, ensure that the roles and responsibilities of all government agencies are precisely defined to eliminate ambiguity and ensure smooth, orderly implementation.

The government should ensure that the legislative framework promotes consistent interpretation and application by implementing officials.

Objective 3: **Providing the forest industry "freedom to manage" in delivery of defined results**

The philosophy of a results-based regulatory framework is that the government should clearly set the objectives or results that should be achieved, and that industry should be given freedom in how to meet those results. By significantly reducing the number of planning requirements and prescriptive rules, the industry should have more "freedom to manage" to achieve defined results than the current Code provides.

Industry does not believe the proposed results-based code would provide them with sufficient flexibility to manage effectively. Many industry respondents were very critical of the framework for continuing to rely on a number of prescriptive, "one size fits all" rules, and for not allowing sufficient flexibility in the resource development permit process. They propose to have results and rules developed by licensees themselves in the plans they submit to government, so that they can be tailored to meet local ecological, economics, and social conditions. Industry would also prefer to have the planning framework better coordinated with certification and related sustainable forest management planning initiatives.

Environmentalists are generally not supportive of this objective. They are very concerned about the government turning too much responsibility for managing the forest to companies and professionals. Environmental groups are strongly opposed to having industry "write their own rules," and prefer instead to find ways to strengthen generally applicable results and rules to protect environmental values.

Recommendations

The government should review contested result statements to ensure that they are sufficiently clear, measurable, and enforceable.

The government should consider increasing the flexibility of the framework by creating an option whereby licensees can opt out of parts of the general regulatory framework, but only if they can demonstrate a commitment to criteria and indicators of sustainable forest management that will meet or beat the environmental standards in the regulatory framework.

The government should clarify the evidentiary burden required to meet the Resource Development Permit tests.

The government should consider revising the Resource Development Permit to provide for minor amendments and "gating."

While encouraging licensees to do as much as feasible to resolve potential conflicts before submitting Resource Development Permits, the government should clearly acknowledge its role as the ultimate authority in resolving conflicts in cases of overlapping resource claims.

Objective 4: **Maintaining the Code's high environmental standards**

Environmentalists believe the proposed results-based code would threaten environmental standards they view as already too weak. They believe the existing Code has failed to achieve its environmental objectives for several reasons. First, landscape level planning, the main vehicle for the protection of biodiversity, has only been implemented in several places in the province. Second, they believe the pursuit of environmental goals has been limited by the timber supply impact caps placed on Code implementation. In the view of environmentalists, the proposed results-based code would further weaken environmental standards, by:

- reducing government oversight of industry by severely limiting operational planning requirements and eliminating site level plans;
- increasing the importance of enforcement while government resources for enforcement are declining;
- relying on standards that are not measurable, auditable, or enforceable; and,
- allowing many exemptions to objectives, rules, and results.

Industry believes that many of the results and rules proposed by the government "would be worse for industry than the existing Code," in that they would be more restrictive or costly to apply. Industry's characterization is dramatically at odds with the criticisms of environmental groups that the results-based approach threatens environmental values because it reduces government oversight and delegates too much responsibility to industry.

Recommendations

The government should review the proposed regimes for environmental values and ensure that, at a minimum, they maintain existing environmental standards.

The government should, in collaboration with the expert community, co-operatively develop an effectiveness, evaluation, and monitoring framework for all code values, and report publicly on the results of those evaluations.

The government should conduct, in collaboration with the expert community, a scientific review of the biodiversity guidelines and the results and rules for riparian protection. Ideally, these reviews would occur prior to the introduction of any new code. If that is not feasible, the framework should be designed to easily accommodate the results of the reviews.

The government should put in place legally binding interim biodiversity objectives prior to the implementation of the new code. The interim objectives should be subjected to a public consultation process before they are brought in to force. To the extent feasible, this should be coordinated with the recommended scientific review of the biodiversity objectives.

Objective 5: **Continuing to balance social, environmental and economic interests**

Finding the right balance between environmental, social, and economic objectives is the most difficult challenge in designing the results based code. Perhaps the biggest gap revealed during the consultation process was the sharp differences of opinion on which of these three interests should be emphasized, and how the balance between them should be drawn when they come into conflict. Many rural communities and industry groups are particularly concerned that socio-economic objectives are not adequately reflected in the proposed new regime. Many believe that timber is treated as a residual value after other objectives have been provided for. They would like to see clear timber targets built into land use objectives.

In contrast, environmental groups are extremely concerned about how socio-economic objectives will constrain environmental objectives. Rather than seeing timber as a residual, they believe current policy, and the results-based code proposal, give priority to timber and treat environmental values as residual. They are particularly opposed to the proposal to continue to limit the impacts of the code on timber supply to 6%. Environmentalists emphasize how constraining these timber supply impact caps have been to implementing important elements of the code, especially the biodiversity provisions. They want timber supply impact caps eliminated. In addition, they would like to see ecosystem-based forest management adopted as an overarching objective. They prefer an approach to forest planning where practices are designed to ensure environmental values are protected, and timber harvest levels are calculated as a residual.

Recommendations

The government should conduct an open reconsideration of the policy to limit the impact of the Code on timber supply to 6%. The analysis should include an assessment of how much the Code has constrained timber supply thus far, and what impact the policy has had on the Code's ability to protect environmental values.

The government should establish clear timelines, and provide strategic direction and adequate resources to the land use processes that guide forestry operations to ensure that they are completed in a timely manner.

Objective 6: Maintaining and enhancing the level of public acceptance of forest management

Public acceptance of forest management is determined by a number of things, including how well the public thinks the values they care about in the forest are being protected. Building confidence that public values are protected requires adequate information about forest activities and their consequences, and that the government and licensees consult with the public on land use objectives and proposed resource development. Under the proposed results-based code, licensees have a legislated requirement to consult with the public and consider public comments on the RDP. Licensees will be expected to describe their public consultation efforts in the evidence submitted to the district manager to support authorization of the RDP, although the methods licensees use to gather and consider public input and the evidentiary basis for RDP approval are not legislated. There are no rules or results under the proposed code to guide public consultation.

This approach is a departure from the many specific procedural requirements under the existing Code for public review and comment, and environmental stakeholders recommended that the proposed code be revised to include results for achieving adequate, effective public consultation.

A further significant concern among both industry and environmental stakeholders was the fact that RDPs do not specify the locations of cutblocks and roads, or include any other site-specific information or assessments. Without this information, many respondents felt that the public and First Nations would have insufficient information to adequately assess whether RDPs could result in impacts to their specific resource uses, cultural values, or interests. This was considered a significant drawback in the proposed code, and a broad cross-section of presenters recommended that site-specific information and plans be provided to the public so that their input is well-informed.

Recommendations

Clarify and define public consultation objectives and processes for the results-based code.

The government should restore site levels plans to the framework. Their content could be specified, they could be made public, and consideration should be given to whether they should be binding on licensees.

The government should ensure that appropriate requirements for professional regulation are contained in legislation for all professionals involved in delivery of the code.

Objective 7: **Consistency with the resource capacity of government**

Many of the changes proposed in the discussion paper are intended to deliver a results based code with fewer government resources than the existing framework. Perhaps the most important change is the simplification of planning requirements, especially the elimination of approved site plans, which will result in far less staff time being absorbed by review and approvals.

There was not much discussion during the public consultation process about whether the proposed results-based code would be consistent with the resource capacity of government. There was a significant amount of concern among environmentalists and others about whether the level of resources the government has allocated to forest management and associated activities is adequate to protect the public values in the forest. The government has initiated significant budget cuts for the three ministries involved in the Code. Over the next three years, the number of ministry employees will be reduced by between 31% and 36%.

Objective 8: **Strengthening the compliance and enforcement regime**

Compliance and enforcement is a cornerstone in the government's proposed results-based code. The New Era commitment on revising the Forest Practices Code emphasizes compliance and enforcement – "establish a workable, results-based Code, with tough penalties for non-compliance." The proposed results-based code maintains most of the compliance and enforcement provisions of the existing Code.

Several important changes are proposed. A new statutory power is proposed, permitting the government "to intervene proactively in certain situations where a contravention has not yet occurred." New requirements for notification of commencement, suspension, and cessation of operations, are proposed to facilitate inspection and monitoring.

The most complex issue in the proposed compliance and enforcement regime is the question of whether due diligence should be a defence in cases of administrative penalties. Such a defence would mean "that a person who causes a contravention of an enactment may be excused for that contravention if that person can demonstrate that they took all reasonable care or "due diligence" to prevent the contravention."[1]

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[1] Garry Mancell, Submission to MLA Committee, p. 1.

The issue of due diligence is very important, because it influences the incentives of companies and determines the allocation of liability between licensees and the government. The overall thrust of the results-based code proposal is to shift liability from the government to the industry, and reducing the use of a due diligence defence would be consistent with that. But the enforcement regime needs to create the appropriate incentives for industry to avoid contravening the results and rules while simultaneously meeting norms of procedural fairness. The real question is: *who should be responsible when a result or a rule is contravened despite the best efforts of the regulated community?* Providing a due diligence defence would make the government responsible in those circumstances; preventing a due diligence defence would make the industry liable.

There is unanimity within the industry and among professional associations that due diligence should be a complete defence. Licensees and industry lawyers also argue that principles of fairness and natural justice suggest that a due diligence defence should be provided. There is a consensus among environmental groups that due diligence should not be a defence. Environmentalists believe that due diligence has no place in the administrative penalty regime.

Environmentalists are very concerned about the government's capacity for and commitment to effective enforcement. They are concerned about how staff cuts will affect enforcement. They also argue that because of the absence of clear, measurable results in many areas, and because of the reduction in operational planning requirements, enforcement under the results-based code will be more expensive, complex, and difficult.

Industry groups believe that the Code already has a very strong compliance and enforcement framework. They would like to see the framework streamlined by eliminating administrative penalties. They also believe that more positive incentives to promote compliance should be built in, for example, by giving credit to companies that have achieved certification.

Recommendations

The government should ensure sufficient resources are deployed to enforce the code properly.

The government should consider the certification status of companies when developing compliance and monitoring and auditing schedules.

First Nations

The concerns raised by First Nations in the process are not adequately captured in the analysis of the eight objectives. In their oral and written submissions, First Nations raise a broad spectrum of concerns with the proposed code, including a number of comments that reflected the range of views expressed by other parties. But there are also a number of concerns that were distinctive to First Nations.

Generally, First Nations express the concern that the proposed results-based code gives inadequate attention to their aboriginal rights and title. Second, they are concerned that the proposed results-based code does not provide adequate mechanisms for consultations, especially in light of recent court cases that they believe expand the consultation duties of the government and licensees. Third, they are concerned about the loss of requirements for site level information in plans. Without site level details, First Nations believe they will not be able to adequately assess what cultural values or rights may be affected.

The cultural heritage resources section of the proposed code is especially relevant to First Nations. Concerns are expressed about the elimination of the requirement for archaeological impact assessments, the limited definition of the types of sites to which the section applies, and the potential for unfavourable changes to the Heritage Conservation Act.

All First Nations that submitted written briefs said they were not adequately consulted regarding the proposed code. They argue that the process did not meet the government's legal and fiduciary obligations of meaningful consultation. Many First Nations felt that they did not have adequate time to respond to the discussion paper. First Nations believe they are entitled to a different, more formal type of consultation, more consistent with a government-to-government relationship.

The development of a results-based code is not the appropriate vehicle to address the extremely complex, challenging issues confronting the province and its relationship to First Nations. Nonetheless, revisions to the Code should not increase the risk of unjustified infringement of aboriginal rights and title, jeopardize recent positive local developments, or create new obstacles to better, more productive relations with First Nations.

Recommendations

The government should conduct additional discussions with First Nations prior to finalizing the results-based code policy decisions.

The government should ensure that adequate information is available to enable First Nations to adequately assess the impacts of proposed development on their cultural values and aboriginal rights and title.

The government should ensure the consistency of the results-based code with any consultation requirements as defined by the Courts.

Conclusion

In addition to the broad range of concerns highlighted above, most respondents felt that the public had insufficient time to comment on the proposed results-based code, and that the absence of land use objectives (or interim objectives) and the lack of clarity in most of the rules and results seriously undermined their ability to provide meaningful input.

The government should be credited for the openness and transparency of this consultation process. In addition, by laying out a specific framework in the discussion paper, the government made clear its intended direction, and provided an effective focus for public deliberation and debate.

However, given the depth and breadth of the concerns expressed throughout the consultation process, the version of the results-based code proposed in the May 1 discussion paper does not adequately meet the objectives established by the government. Further policy development and consultations are necessary before legislation should be introduced.

Recommendation

The government should conduct additional discussions with First Nations and various groups to revise the results-based code proposal. To this end, the government should also work with the forest industry, the ranching sector, the woodlot community, and environmental organizations, and any other parties it deems appropriate.

Summary List of Recommendations

Before policy decisions are finalized for the results-based code, the government should consider the following recommendations:

1. **The government should conduct an open reconsideration of the policy to limit the impact of the Code on timber supply to 6%. The analysis should include an assessment of how much the Code has constrained timber supply thus far, and what impact the policy has had on the Code's ability to protect environmental values.**

2. **The government should review the proposed regimes for environmental values and ensure that, at a minimum, they maintain existing environmental standards.**

3. **The government should, in collaboration with the expert community, co-operatively develop an effectiveness, evaluation, and monitoring framework for all code values, and report publicly on the results of those evaluations.**

4. The government should conduct, in collaboration with the expert community, a scientific review of the biodiversity guidelines and results and rules for riparian protection. Ideally, these reviews would occur prior to the introduction of any new code. If that is not feasible, the framework should be designed to easily accommodate the results of the reviews.

5. The government should work with industry to perform an analysis of the cost implications of the proposed results-based code, and create an efficient and effective system for monitoring the costs of implementing the results-based code.

6. The government should consider creating a more distinctive regulatory regime for woodlots to account for their unique character.

7. The government should review contested result statements to ensure that they are sufficiently clear, measurable, and enforceable.

8. The government should consider increasing the flexibility of the framework by creating an option whereby licensees can opt out of parts of the general regulatory framework, but only if they can demonstrate a commitment to criteria and indicators of sustainable forest management that will meet or beat the environmental standards in the regulatory framework.

9. The government should ensure sufficient resources are deployed to enforce the code properly.

10. The government should consider the certification status of companies when developing compliance and monitoring and auditing schedules.

11. The government should consider simplifying its organizational arrangements for delivering the results-based code and, at a minimum, ensure that the roles and responsibilities of all government agencies are precisely defined to eliminate ambiguity and ensure smooth, orderly implementation.

12. The government should ensure that the legislative framework promotes consistent interpretation and application by implementing officials.

13. The government should clarify the evidentiary burden required to meet the Resource Development Permit tests.

14. The government should consider revising the Resource Development Permit to provide for minor amendments and "gating."

15. While encouraging licensees to do as much as feasible to resolve potential conflicts before submitting Resource Development Permits, the government should clearly acknowledge its role as the ultimate authority in resolving conflicts in cases of overlapping resource claims.

16. The government should restore site levels plans to the framework. Their content could be specified, they could be made public, and consideration should be given to whether they should be binding on licensees.

17. The government should ensure that appropriate requirements for professional regulation are contained in legislation for all professionals involved in delivery of the code.

18. The government should establish clear timelines, and provide strategic direction and adequate resources to the land use processes that guide forestry operations to ensure that they are completed in a timely manner.

19. The government should put in place legally binding interim biodiversity objectives prior to the implementation of the new code. The interim objectives should be subjected to a public consultation process before they are brought in to force. To the extent feasible, this should be coordinated with the recommended scientific review of the biodiversity objectives.

20. The government should clarify and define public consultation objectives and processes for the results-based code.

21. The government should conduct additional discussions with First Nations prior to finalizing the results-based code policy decisions.

22. The government should ensure that adequate information is available to enable First Nations to adequately assess the impacts of proposed development on their cultural values and aboriginal rights and title.

23. The government should ensure the consistency of the results-based code with any consultation requirements as defined by the Courts

24. The government should conduct additional discussions with First Nations and various groups to revise the results-based code proposal. To this end, the government should also work with the forest industry, the ranching sector, the woodlot community, and environmental organizations, and any other parties it deems appropriate.

Finding the Right Balance

Report of Stakeholder Consultations

on
A Results-Based
Forest and Range Practices Regime
for British Columbia

July 25, 2002

Prepared by

Dr. George Hoberg
Professor and Head
Department of Forest Resources Management
University of British Columbia

Preface

Glenn Farenholtz, RPF, played a lead role in managing the process and analyzing the comments, and assisted in the writing of this report.

During the stakeholder consultations, we received a great deal of help from officials of the three ministries – Ralph Archibald, Rod Davis, Judy Godfrey, Warren Mitchell, Brian Murphy, Bruce Sieffert, Rodger Stewart, and Terje Vold.

We also received assistance from Rishad Quazi, who designed and managed the resultsbasedcode.ca website. Holly Spiro helped with the section on First Nations. We are very grateful to Bonni Gordon, Heather Akai, and Kristine Weese who also assisted in a number of areas.

Executive Summary

In its New Era document, the Government of British Columbia promised to "Streamline the Forest Practices Code to establish a workable, results-based Code, with tough penalties for non-compliance." The government introduced a discussion paper, *A Results-Based Forest and Range Practices Regime for British Columbia*, on May 1, 2002. The government established a three-part public consultation process:

- A panel of Members of the Legislative Assembly, chaired by North Island MLA Rod Visser;
- A more technical, stakeholder process directed by George Hoberg, Head of the Department of Forest Resources Management at UBC; and,
- A web-based public comment forum, managed by Professor Hoberg.

The public comment period ran from May 1 to June 30, 2002.

The purpose of this report is to summarize and analyze the concerns raised during the stakeholder consultation process. A companion report will report on the consultations by the MLA panel.

The discussion paper attracted a significant amount of comment. The MLA panel held 13 full day meetings in locations throughout the province. The stakeholder process included meetings with 58 groups and individuals, and 133 written submissions. The discussion forum on the website attracted 170 registered users, and 272 entries were posted.

The proposed results-based code elicited an enormous amount of very rigorous, constructive analysis and debate. A wide range of stakeholders provided very detailed, thoughtful analysis of the proposal, some even providing constructive alternative solutions. The quality of these contributions is testimony to the depth and breadth of expertise, dedication, and concern that British Columbians have for their forests, and their willingness to engage thoughtfully and civilly in a public consultation exercise.

A comprehensive review of the concerns raised during the public comment period can be grouped into five broad themes. First, there is quite a high level of discontent about the proposal for a results-based code laid out in the discussion paper. Virtually all of those who commented on the proposal had significant problems with the government's proposed direction.

Second, the comments on the discussion paper reveal the sharp value differences that have characterized conflicts over forest policy in BC over the past several decades. For the most part, there was little agreement across different categories of stakeholders about why the proposal was flawed. Many of the comments reflect two clusters of values: an industry perspective, and an environmental perspective. The different perspectives were very powerful in influencing a wide range of perceptions about the proposed results-based code. Looking at the same document, people coming from each perspective saw remarkably different things. These sharp differences were evident throughout the process.

Industry groups were sharply critical of the proposal because they believe it still contains too many prescriptive rules, and they do not believe it will reduce their costs.

Environmental groups were also sharply critical, but for the opposite reason. They believe the proposal weakens environmental standards and gives too much control to the industry. Finding the right balance among these competing values is perhaps the greatest challenge in designing a results-based code.

The third major theme was the issue of how much information about forest operations and their consequences should be required and made public. Many respondents felt the proposed results-based code would result in poorly informed government decisions and prevent the public from receiving adequate information on forest operations. Others felt that information requirements were too uncertain and potentially burdensome. Adequate information is crucial to effective decision making and public confidence, but the gathering and analysis of information can be very costly and time consuming.

Fourth, there was a significant amount of concern about whether the level of resources the government has allocated to forest management and associated activities is adequate to protect the public values in the forest. The government has initiated significant budget cuts for the three ministries involved in the Code. Over the next three years, the number of ministry employees will be reduced by between 31% and 36%.

The final major theme of the consultation process is the dilemma of how to design a forest practices regime to provide for variability across space and time. Uniform rules that apply across the province may be clear and easy to understand, but they will not be effective or efficient if the circumstances in which they apply vary significantly. Policies designed to account for the variation in ecological, economic, and social conditions across the province may be more effective in some ways, but their complexity may make it harder to assure the public that the values they want in the forest are being protected. Adapting to new information or conditions that emerge over time is also a difficult task.

Industry groups prefer far more flexibility than provided for in the current Code or the proposed results-based code. Rather than relying on generally applicable "one size fits all" results or rules, industry groups propose to have results and rules developed by licensees in their own plans. That way, they can be tailored to meet local ecological, economic, and social conditions.

Environmental groups are strongly opposed to having industry "write their own rules," and prefer instead to find ways to strengthen generally applicable results and rules. To the extent that there are variations in conditions, environmentalists believe they should be addressed by more refined rules that account for differences – for example by allowing old forest retention requirements to vary by natural disturbance type.

There may be a way to build in more flexibility without jeopardizing environmental values. Sustainable forest management (SFM) planning is one of the most important and innovative developments in forest management over the past half decade, yet the legal framework proposed in the discussion paper ignores it. The government could establish a basic regulatory framework that was designed to adequately protect environmental values. For those licensees who have the resources to do robust SFM planning, an option could be provided where they can substitute the results and rules they have developed for parts of the government regulatory model. But they could only be exempted from the regulatory model if they can demonstrate that they can meet or beat the environmental values provided in the regulatory model. Not all licensees may choose to do that, or have the resources to do so effectively. They would have to comply with the requirements of the government regulatory framework.

The government should be credited for the openness and transparency of this consultation process. In addition, by laying out a specific framework in the discussion paper, the government made clear its intended direction, and provided an effective focus for public deliberation and debate.

However, given the depth and breadth of the concerns expressed throughout the consultation process, the version of the results-based code proposed in the May 1 discussion paper does not adequately meet the objectives established by the government. Before policy decisions are finalized for the results-based code, the government should consider the following recommendations:

1. The government should conduct an open reconsideration of the policy to limit the impact of the Code on timber supply to 6%. The analysis should include an assessment of how much the Code has constrained timber supply thus far, and what impact the policy has had on the Code's ability to protect environmental values.

2. The government should review the proposed regimes for environmental values and ensure that, at a minimum, they maintain existing environmental standards.

3. The government should, in collaboration with the expert community, co-operatively develop an effectiveness, evaluation, and monitoring framework for all code values, and report publicly on the results of those evaluations.

4. The government should conduct, in collaboration with the expert community, a scientific review of the biodiversity guidelines and results and

rules for riparian protection. Ideally, these reviews would occur prior to the introduction of any new code. If that is not feasible, the framework should be designed to easily accommodate the results of the reviews.

5. The government should work with industry to perform an analysis of the cost implications of the proposed results-based code, and create an efficient and effective system for monitoring the costs of implementing the results-based code.

6. The government should consider creating a more distinctive regulatory regime for woodlots to account for their unique character.

7. The government should review contested result statements to ensure that they are sufficiently clear, measurable, and enforceable.

8. The government should consider increasing the flexibility of the framework by creating an option whereby licensees can opt out of parts of the general regulatory framework, but only if they can demonstrate a commitment to criteria and indicators of sustainable forest management that will meet or beat the environmental standards in the regulatory framework.

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14. The government should consider revising the Resource Development Permit to provide for minor amendments and "gating."

15. The government should restore site levels plans to the framework. While there should not be a requirement for government approval, their content could be specified, they could be made public, and consideration should be given to whether they should be binding on licensees.

16. The government should ensure that appropriate requirements for professional regulation are contained in legislation for all professionals involved in delivery of the code.

17. The government should establish clear timelines, and provide strategic direction and adequate resources to the land use processes that guide forestry operations to ensure that they are completed in a timely manner.

18. The government should put in place legally binding interim biodiversity objectives prior to the implementation of the new code. The interim objectives should be subjected to a public consultation process before they are brought in to force. To the extent feasible, this should be coordinated with the recommended scientific review of the biodiversity objectives.

19. The government should clarify and define public consultation objectives and processes for the results-based code.

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23. The government should conduct additional discussions with First Nations and various groups to revise the results-based code proposal. To this end, the government should also work with the forest industry, the ranching sector, the woodlot community, and environmental organizations, and any other parties it deems appropriate.

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1.0 Introduction

In its New Era document, the Government of British Columbia promised to "Streamline the Forest Practices Code to establish a workable, results-based Code, with tough penalties for non-compliance." The government introduced a discussion paper, *A Results-Based Forest and Range Practices Regime for British Columbia*, on May 1, 2002. The purpose of this report is to summarize and analyze the concerns raised about the discussion paper during the consultation process with stakeholders and others.

2.0 Description of the consultation process

The government established a three-part public consultation process:

- A panel of Members of the Legislative Assembly, chaired by North Island MLA Rod Visser;
- A more technical, stakeholder process directed by George Hoberg, Head of the Department of Forest Resources Management at UBC; and,
- A web-based public comment forum, managed by Professor Hoberg.

The public comment period ran from May 1 to June 30, 2002.

The main vehicle for communication about the consultation process was a website, www.resultsbasedcode.ca. The discussion paper and background documents were posted on the website, as well as the schedules for the MLA panel and the stakeholder consultations. The discussion paper attracted a significant amount of comment. The MLA panel held 13 full day meetings in locations throughout the province. Those who chose to submit their briefs electronically had them posted on the website.

The stakeholder process included meetings with 58 groups and individuals, and 133 written submissions, most of which are posted on the website. A full list of stakeholder meetings and written briefs is contained in Appendix A.

The discussion forum on the website attracted 170 registered users, and 272 entries were posted. The website was used extensively, receiving a total of 88,000 hits from May 1 to June 30. Statistics on website usage are contained in Appendix B.

3.0 The government proposal – general overview of discussion paper

The discussion paper outlines a proposed policy framework for a results-based forest and range practices code. A shift to a more results-based model was deemed necessary to reduce costs to both industry and government, and to move away from the overly prescriptive approach of the existing Code that many think is inefficient and ineffective. The results-based code is intended to maintain the existing Code's high environmental standards while giving industry freedom to manage in the delivery of defined results.

The resource agencies responsible for developing and overseeing implementation of the results-based code include: the Ministry of Forests (MOF), the Ministry of Water, Land and Air Protection (MWLAP), and the Ministry of Sustainable Resource Management (MSRM). The discussion paper outlines the roles of each agency under a results-based code.

The proposed legal framework for the results-based code includes three main pillars:

1. *Land use zones and objectives* for landscape-level forest resource values, including biodiversity, wildlife, visual quality, water quality, lakeshores, access, range and timber. Land use zones and objectives would guide development of the resource development permit.

   The discussion paper discusses the role that land use zones and objectives would play under the results-based code, and the agencies responsible for developing them. Until the land use zones and objectives are completed, interim zones and objectives would be available to guide resource development planning in some cases.

2. *A resource development permit*, which would essentially be a map of defined areas proposed for timber harvesting and road building. Permits would be prepared by forest licensees and authorized by the MOF district manager if they meet legal tests defined in the code.

   The discussion paper discusses which licensees would submit resource development permits, the types of development authorized by the permit (single or multiple cutblocks, and corridors for roads), content requirements of the permit, and the four tests a permit must pass before a district manager can authorize it. In summary, the permit (1) must not conflict with tenures or legal rights of other parties, (2) must meet the objectives of land use zones for the development units under the permit, (3) must undergo public review and consider public comments, and (4) must identify and locate development units to avoid terrain hazards and cumulative hydrological impacts in community watersheds and watersheds with significant downstream fisheries values.

3. *Site level practice standards*, including results (measurable outcomes) and rules (how something must be done) licensees would have to follow on the area under the resource development permit. Results and rules are proposed for 17 forest resource values, including biodiversity, wildlife trees, coarse woody debris, visual quality, forest health, roads, silviculture, gene resources, soil conservation, terrain hazard management, community watersheds and watersheds with significant downstream fisheries values, riparian management, ungulate winter range, identified wildlife, resource features, cultural heritage resources, and lakeshore management.

   For each of the forest resource values, the discussion paper outlines one or more of the following: (1) non-binding goals; (2) corresponding approval tests under the resource development permit; (3) legally-enforceable results; (4) rules; (5) circumstances where exemptions from achieving objectives, results or rules may be authorized by government officials; (6) statutory powers of government officials; and, (7) information requirements.

The discussion paper also sets out proposed results-based regimes for woodlot licences, range management, and fire management.

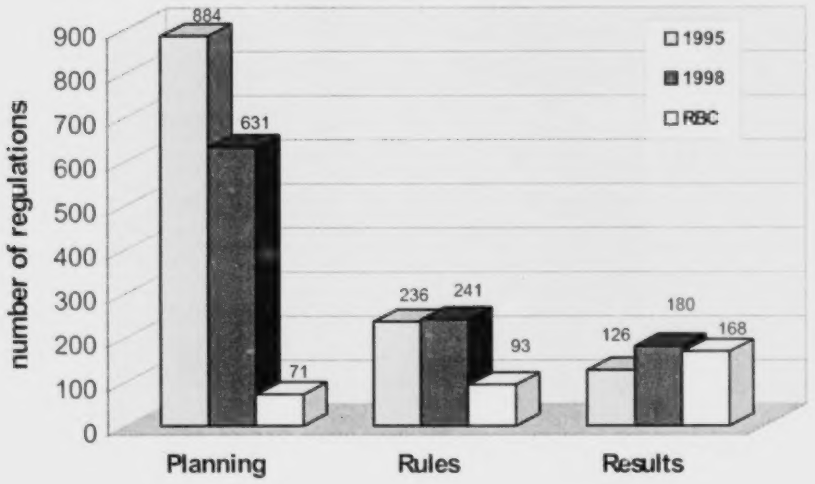
The legal framework for the results-based code includes a compliance and enforcement regime, and the discussion paper outlines how the current compliance and enforcement regime would be updated to reflect results-based forest management. In particular, the discussion paper discusses the role of due diligence and absolute liability when determining administrative remedies for non-compliance with the code, and outlines three possible options for applying due diligence as a defence against non-compliance. The discussion paper outlines a number of other proposed changes to the existing compliance and enforcement regime, including changes to maximize the effectiveness and efficiency of the MOF's compliance and enforcement organization.

In addition to outlining a legal framework for the results-based code, the discussion paper discusses the components of the proposed code that would not be legislated but would support the code's legal framework. These components include: best available science and inventory; best management practices; guidebooks or operational expectations; standards documents; assessments, including procedures and results; audit and monitoring results; planning documents such as sustainable forest management plans; and, professional sign-off and opinions. These non-legal components of the code could be used to create an evidentiary basis to pursue authorization of the resource development permit, influence the selection of practices to achieve results, and enable proof of due diligence in achieving a result.

The discussion paper concludes with a discussion of the role that the Forest Practices Board might play under a results-based code. The discussion paper proposes that the role of the Board remains important, and that the Board will continue to conduct independent audits, investigate complaints, participate in appeals, and prepare special reports.

The proposed results-based code would reduce the complexity of the regulatory framework, as shows in Figure 1. When the Code was introduced in 1995 there were, according to government figures, approximately 1245 regulatory requirements (in terms of number of planning requirements, rules and results that needed to be met). The "streamlining the Code" initiative of the late 1990s reduced that number to about 1050. The government estimates that the proposed results-based code would significantly reduce the number of regulatory requirements to about 332 – a 70% reduction from the existing Code.[1]

Figure 1
Change in the Distribution of Code Regulations between 1995, 1998 and the proposed Results Based Code



4.0 The public concerns

4.1 Overarching themes

A comprehensive review of the concerns raised during the public comment period can be grouped into five broad themes. First, there is quite a high level of discontent about the proposal for a results-based code presented in the discussion paper.

Second, the comments on the discussion paper reveal the sharp value differences that have characterized conflicts over forest policy in BC over the past several decades. For the most part, there was little agreement across different categories of stakeholders about why the proposal was flawed. Industry groups were sharply critical of the proposal because they believe it still contains too many prescriptive rules, and they do not believe it will reduce their costs. Environmental groups were also sharply critical, but for the opposite reason. They believe the proposal weakens environmental standards and gives too much control to the industry.

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[1] These figures are provided by the Forest Practices Branch, Ministry of Forests.

Many of the comments reflect clusters of values, or worldviews, that are summarized in Table 1.

Table 1

Industry	Environmental
timber first	environment first
smaller government	larger government (but don't trust it)
trust industry	distrust industry
trust professionals	distrust professionals
forest environment is resilient	forest environment is fragile
minimal constraint between timber and environmental values	timber production harshly constrains environmental values

The different worldviews were very powerful in influencing a wide range of perceptions about the proposed results-based code. Looking at the same document, people coming from each perspective saw remarkably different things. These sharp differences will be evident throughout the report of public concerns below. Finding the right balance among these competing values is perhaps the greatest challenge in designing a results-based code.

Third, another major challenge in designing any forest practices regime is how to provide for variability over space and time. Uniform rules that apply across the province may be clear and easy to understand, but they will not be effective or efficient if the circumstances in which they apply vary significantly. Hamish Kimmins writes that it was "the Great Mistake" of earlier stages of forest management "to ignore the spatial variability in the ecological characteristics of the forest."[2] Policies designed to account for the variation in ecological, economic, and social conditions across the province may be more effective in some ways, but their complexity may make it harder to assure the public that the values they want in the forest are being protected. Adapting to new information or conditions that emerge over time is also a difficult task.

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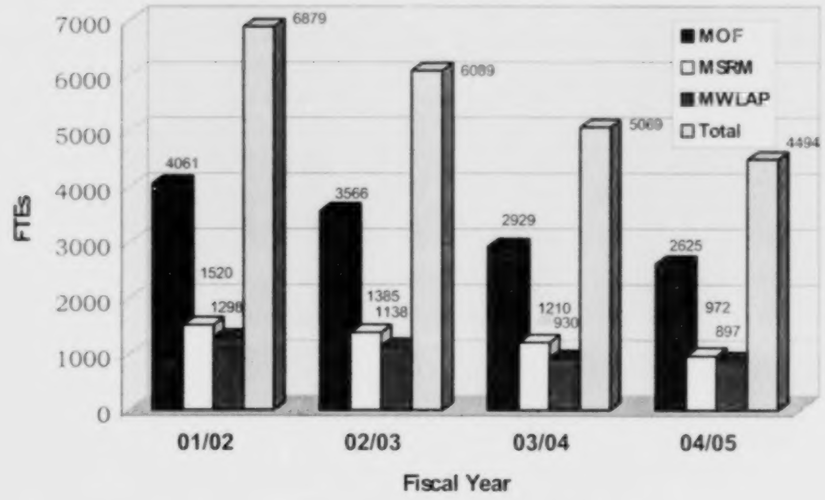
[2] J.P. (Hamish) Kimmins, "Respect for Nature: An Essential Foundation for Sustainable Forest Management," in Ecosystem Management of Forested Landscapes: Directions and Implications, Robert D'Eon, et al, eds., (Vancouver: UBC Press, 2000), p. 16.

Fourth, another major theme was how much information about forest operations and their consequences should be required and made public. Many respondents felt the proposed results-based code would result in poorly informed government decisions and prevent the public from receiving adequate information on forest operations. Others felt that information requirements were too uncertain and potentially burdensome. Adequate information is crucial to effective decision making and public confidence, but the gathering and analysis of information can be very costly and time consuming. Finding the right balance is a major challenge.

Finally, there was a significant amount of concern about whether the level of resources the government has allocated to forest management and associated activities is adequate to protect the public values in the forest. The government has initiated significant budget cuts for the three ministries involved in the Code. Over the next three years, the number of ministry employees will be reduced by between 31% and 36%. Figure 2 shows the reductions for the three agencies.[3]

Figure 2

Trends in Staffing Levels
for BC Renewable Resource Ministries



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[3] These figures come from each ministry's Service Plan.

4.2 The major issues

This section examines the major issues that arose during the consultation process. Each section consists of the following elements:

- *an overview* describing what the results based code proposes to do, what the intention of that change was, and how it differs from the existing Forest Practices Code;
- *concerns* raised during the consultation process;
- *alternatives* offered by those participating in the consultation process;
- *analysis* of the issues at stake;
- *recommendations*, if appropriate, for further government consideration based on the concerns raised and the analysis.

This issue analysis does not include all of the detailed input received during the consultation process. To ensure that there is a consolidated record of comments, more detailed technical comments are included in Appendix C – A Compendium of Technical Input on the Results-Based Management Regimes.

4.2.1 The consultation process

Concerns

The consultation process itself was the subject of significant criticism. In fact, if there was one concern that had consensus during the consultation period, it was that the government had provided too little time for consultation on the proposed results-based code. There was also a significant amount of concern that the government was not sincere about incorporating the input from the consultation process into the next stages of the policy development process. This concern was aggravated by the fact that legislative drafting was proceeding during the consultation process, adding to the impression that the government had its mind made up. Environmentalists raised concerns that important aspects of the proposed framework, especially the interim objectives being proposed for biodiversity, were not included in the paper. A number of industry groups expressed concern that the development of the proposed framework was done without adequate input from those in the industry who would be responsible for applying much of the framework.

First Nations groups expressed grave concerns that they had not been adequately consulted about such an important proposed legislative change. A number of First Nations stated that the consultation process was not consistent with the requirements for consultation developed in cases from the Supreme Court of Canada, as well as the BC Supreme Court and Court of Appeals.

Alternatives

There was widespread agreement that additional policy development and consultation will be required before the introduction of legislation. Specific recommendations varied by category of interest:

- Environmentalists would like the introduction of legislation to be postponed until more information about the proposed results-based code, such as interim biodiversity objectives and draft legislation, is available, and until the details and links to other forest policy initiatives (the working forest, sustainable resource management planning, tenure reform) are available. They would like to see more stakeholder, including environmental group, involvement in legislative drafting.[4]
- Industry groups urge the government to begin intensive consultation with users as soon as feasible. They believe the existing proposal suffers from the absence of a user perspective, and would like to see more direct and intensive industry involvement in revising the proposal.[5]
- First Nations groups urge that formal consultation between the government and First Nations must occur before new legislation is brought in.

Analysis

A consultation process can be evaluated by four criteria:

- adequacy of the time provided for consultation;
- openness and transparency of the process;
- well-informed by sufficient direction from government; and
- meaningful, in terms of government commitment to addressing the concerns raised in the process.

The *time* provided by the government for consultation on such an important and significant change in forest policy was short. One unfortunate consequence of this short period of time is that there has been little interaction across categories of stakeholders. Despite the open public forum on the website, and the posting of many written submissions on the website, there has been limited cross-referencing to competing arguments presented by other interests.

The process was *open and transparent* – the discussion paper was widely available, the website provided a vehicle for public comment by anyone with access to the internet, the MLA panel held open public meetings in 13 locations across the province, and Dr. Hoberg met with a wide variety of individuals and groups, whose briefs are posted on the website for all to consider.

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[4] Forest Caucus of the BCEN, June 26, 2002, p. 1.

[5] For example, *Interfor's Response to Results-Based Code Discussion Paper, A User Perspective*, p.4.; Lignum, p. viii; Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 15.

In addition, the process was relatively *well-informed* by a detailed discussion paper (and companion documents) that made the proposed direction of the government clear. There was some comment that the proposal was vague, or that important pieces were missing. There is no doubt that, in several places, more detail would have made a significant difference in the ability of the public to consider the consequences of the proposal, for example the government's intentions with respect to interim objectives for biodiversity.

The quality of public debate would also have been improved if the discussion paper had provided more examples of practical application of the new code. In addition, it would have been useful to see what alternatives the government considered, and how it evaluated the consequences of those alternatives compared to the model presented in the discussion paper. This additional information would have significantly lengthened the document, which may have made it harder for those commenting to absorb.

Despite these concerns, the proposed results-based code elicited an enormous amount of very rigorous, constructive analysis and debate. A wide range of stakeholders provided very detailed, thoughtful analysis of the proposal, some even providing constructive alternative solutions. The quality of these contributions is testimony to the depth and breadth of expertise, dedication, and concern that British Columbians have for their forests, and their willingness to engage thoughtfully and civilly in a public consultation exercise.

Whether the consultation process has been *meaningful*, in terms of whether it will influence government direction, depends on how the government chooses to respond to the input it receives.

4.2.2 Objectives and their balancing

Section 2.0 of the discussion paper lays out the government's eight objectives guiding the proposal:

- reducing the transactional and operational costs to industry;
- reducing the Code's complexity;
- providing the forest industry "freedom to manage" in delivery of defined results;
- maintaining the Code's high environmental standards;
- continuing to balance social, environmental and economic interests;
- maintaining and enhancing the level of public acceptance of forest management;
- consistency with the resource capacity of government; and,
- strengthening the compliance and enforcement regime.

Concerns

Generally, there was very little criticism of these objectives. There were, however, sharp differences of opinion on which objectives should be emphasized, and how the balance between objectives should be drawn when they come into conflict. Industry groups support the objectives, but argue that the proposal will not achieve them.[6] They are particularly concerned that socio-economic objectives are not adequately reflected in the proposed new regime. Many in the industry believe that timber is treated as a residual value after other objectives have been met.[7] Industry groups also repeatedly raised concerns about the objective of "strengthening the compliance and enforcement regime"[8], claiming that the existing regime is quite punitive, and their outstanding compliance record does not warrant strengthened enforcement. This concern is addressed in the section on Compliance and Enforcement below.

Environmental groups are extremely concerned about how socio-economic objectives will constrain environmental objectives. Rather than seeing timber as a residual, as industry does, they believe current policy, and the results-based code proposal, give priority to timber and treat environmental values as residual. They are particularly opposed to the assumption adopted by the government that "The results-based regime will employ existing policy that balances environmental conservation with timber supply."[9] The statement refers to a policy decision made when the Forest Practices Code was introduced in 1995 to limit the impact of the Code on timber supply to 6%.[10] According to West Coast Environmental Law, "This is not a balancing of interests, but a caving in to industry by dictating an AAC outcome as the top priority." Environmentalists emphasize how constraining these timber supply impact caps have been to implementing important elements of the code, especially the biodiversity provisions.[11] Environmentalists are also strongly opposed to timber targets.

Alternatives

There are sharp differences in how different stakeholders would like to see competing objectives weighed. Industry groups want to see socio-economic objectives incorporated throughout the policy regime. They are particularly interested in having clear timber targets built into land use objectives. In contrast, environmentalists want timber supply impact caps eliminated. In addition, they would like to see ecosystem-based forest management adopted as an overarching objective. They believe an appropriate approach to balancing is one that ensures human activities occur within the limits of what ecosystems can sustain. In forest planning, they believe practices should be designed to ensure environmental values are protected, and timber harvest levels are calculated as a residual.[12]

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[6] Lignum, p. ii; COFI, *Discussion Paper Final Comments*, p. I; Tom Quirk, RPF, p. 2; Weyerhaeuser Canada, June 5, 2002, p. 2.

[7] Western Forest Products, *Discussion Paper Submission to G.Hoberg Committee*, p. 8; COFI , *First Approximation*, p. 11.

[8] *Discussion Paper*, page 3

[9] West Coast Environmental Law, *Submission from*, p. 7.

[10] This policy is articulated in BC Ministry of Forests and Ministry of Environment, Lands, and Parks, *Forest Practices Code Timber Supply Analysis* (Victoria: Queen's Printer, February 1996).

[11] Maria Hunter, p. 3; West Coast Environmental Law, *Submission from*, pp. 38-39.

Analysis

Finding the right balance between environmental, social, and economic objectives is the most difficult challenge in designing the results based code. Since its adoption, the implementation of the current Code has been constrained by the decision to limit its impacts on timber supply to 6%. This 6% cap was not derived from any sophisticated analytical process into the socially optimum balance between environmental values and timber production. Rather, it was simply a political decision by the government of the day based on a blunt assessment of how large an impact of the Code would be tolerable for the forest sector.[13] Of course, it is the obligation of government to make these difficult choices, and there is nothing intrinsically wrong with selecting a somewhat arbitrary number to guide decision making. Indeed, it is no different in principle than choosing a 12% target for protected areas.

Nonetheless, a review of the timber supply impact cap is warranted. Seven years after the Code was brought into effect, there has been no analysis of the consequences of this decision, either from the economic perspective or the environmental perspective.

Recommendations

The government should conduct an open reconsideration of the policy to limit the impact of the Code on timber supply to 6%. The analysis should include an assessment of how much the Code has constrained timber supply thus far, and what impact the policy has had on the Code's ability to protect environmental values.

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[12] Environmentalists point to the approach adopted by the Clayoquot Sound Scientific Panel, and that proposed to implement ecosystem based planning on the North Coast. See R.F. Holt, R.P.Bio, *An Ecosystem-Based Management Planning Framework for the North Coast LRMP* (Province of British Columbia, March 2001) at 4. Available from government on-line at: http://www.luco.gov.bc.ca/lrmp/ncoast/docs/EBM_framework_doc.pdf.

[13] For an overview of the origins and consequences of the 6% cap, see George Hoberg, "The 6 Percent Solution: The Forest Practices Code," in Benjamin Cashore et al, *In Search of Sustainability: British Columbia Forest Policy in the 1990s*, (Vancouver: UBC Press, 2001).

4.2.3 Does the proposed results-based code "maintain existing high environmental standards"?

In introducing the proposed results-based code, the government made very clear that it was committed to maintaining the existing environmental standards of the Code. This commitment was one of the eight objectives guiding the paper, and it was made very clear in the Ministers' transmittal letter. It is also exemplified in the quotation from Premier Campbell at the opening of the transmittal letter, that the government will not "achieve economic development at the expense of a sustainable environment."

Concerns

This commitment did not raise any concerns among industry groups, and those who commented on it said they believed the proposed results-based code would meet this commitment.[14] COFI describes a number of the environmental standards as "worse than the existing Code," meaning that they would be more restrictive and/or costly for industry to comply with. COFI is also concerned about the scientific support for some of the environmental standards. The association states that leading scientists in conservation biology have found that existing guidance on implementing biodiversity in the Landscape Unit Planning Guide is wrong and will lead to a negative impact on biodiversity.[15]

In contrast, environmentalists believe the proposed results-based code would threaten environmental standards they view as already too weak. Indeed, several of them refer to the existing Code as a "path to species extinction in BC."[16] They believe the existing Code has failed to achieve its environmental objectives for several reasons. First, landscape level planning, the main vehicle for the course-filter protection of biodiversity, has only been implemented in a few places in the province. Second, fine-filter biodiversity provisions, such as wildlife habitat areas and general wildlife measures, have also not been widely implemented. Third, they believe the pursuit of environmental goals has been limited by the timber supply impact caps placed on Code implementation.[17] In the view of environmentalists and First Nations, the proposed results-based code would further weaken environmental standards, by:

- reducing government oversight of industry by severely limiting operational planning requirements and eliminating site level plans;
- increasing the importance of enforcement while government resources for enforcement are declining;
- relying on standards that are not measurable, auditable, or enforceable; and,

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[14] Truck Loggers Association, *Preliminary Response*, p. 4; Lignum, p. iv.

[15] COFI, *Discussion Paper Final Comments*, p. 33-34.

[16] ForestEthics et al, June 19, 2002, p. 2; The Sierra Club of British Columbia, *Submission from*, p. 5.

[17] For example, The Sierra Club of British Columbia, *Submission from*, pp. 5-7.

- allowing many exemptions to objectives, rules, and results.

The issue of exemptions is very troubling to environmentalists and First Nations. Their biggest concern is with the very broad exemptions provided to the old forest protection requirements, which allow a district manager to exempt a RDP from old forest requirement under the following conditions:

- when necessary to address a forest health factor;
- when necessary for road development;
- where no reasonable and cost-effective alternative exists; or,
- when necessary to achieve timber supply objectives as per existing code impact policy.[18]

Environmentalists and First Nations are also concerned about exemptions in the sections on community watersheds, riparian areas, and identified wildlife.[19]

A number of environmental groups and First Nations were also very concerned about the provisions for protection of riparian areas in the proposal, which maintain the basic framework of the existing Code for buffers around certain types of streams. They are particularly concerned about the lack of protection of small fish bearing streams, and tributaries to those streams. They strongly support the arguments made by the federal Department of Fisheries and Oceans that management of small streams under the existing Code does not provide the level of protection necessary to comply with the *Fisheries Act*.[20] Seven professional geomorphologists from the MOF recommend that the discussion paper be redrafted to ensure that riparian goals are clear and that results are enforceable.[21]

Environmental groups, and a number of individuals, also raise concerns about eliminating the requirements for assessments.[22] WCEL states that "there appears to be no legal requirement to identify, classify and map streams and other hydrologic features. Without this information, and information about the location of cutblocks and roads in relation to hydrologic features, it is not clear how meaningful consultation can occur, nor how a statutory decision-maker can satisfy him or herself with regard to RDP Tests #1 and 4. Furthermore, if such assessments are not completed before logging and road-building occur, it may be very difficult in an after-the-fact enforcement process to prove, for example, that a stream that has been heavily impacted was once a fish-bearing stream."[23]

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[18] *Discussion Paper*, p. 17-18.

[19] The Sierra Club of British Columbia, *Submission from*, p. 3-4; West Coast Environmental Law, *Submission from*, p. 4., Cowichan Tribes, p.1, Ditidaht Huu-ay-aht Shared Territory Board, p.11

[20] Sierra Legal Defence Fund and Forest Watch, *Who's Minding Our Forests?*, p. 17, and West Coast Environmental Law, *Submission from*, p. 57., Little Shuswap Indian Band, p.8

[21] Giles, Hudson, Millard, Schwab, Teti, Wilford, and Winkler, p. 4.

[22] Nell Dragovan, p.2; Helen Reid, Cowichan Tribes, p. 2; Westcoast Vancouver Island Wildlife Advisory Committee, p. 1; Vancouver Island Forest Watch, *Submission to Stakeholder Process, June 25, 2002*, p. 5; West Coast Environmental Law, *Submission from*, p. 4

Throughout the process, environmental groups repeatedly warned that the proposed results-base code threatened to re-ignite market based campaigns against BC forest products.[24]

The Forest Practices Board raises concerns about the adequacy of environmental protection in the proposal. It states: "Based on our review of the discussion paper, the results-based code is a higher risk model than either the current Code or the system in place before the Code."[25] The Board raises the following concerns with respect to environmental values:

- the reduction in planning requirements will increase the risk of unacceptable results occurring;
- the results are not clear and measurable;
- enforcement will be more difficult, expensive, and uncertain;
- there is heavy reliance on unproven landscape level planning; and,
- there is an absence of interim objectives for important environmental values.

Alternatives

Speaking for a broad range of environmental groups across the province, the Forest Caucus of the BCEN states: "Legally implemented landscape level objectives for biodiversity (for all values addressed in the Biodiversity Guidebook), which are scientifically defensible and unconstrained by timber supply impact caps or timber targets, must be in place before bringing into effect a results-based Code, and must not be subject to exemptions. At a minimum, legally binding interim biodiversity objectives must be in place."[26]

Environmentalists and many First Nations also want to see the environmental standards strengthened by:

- adopting ecosystem-based management as guiding approach;
- removing timber supply impact caps;
- extending riparian reserve zones to protect small streams;
- legislating the "precautionary principle" (i.e., emphasizing rules that avoid undesirable results); and,
- reinstating the "adequately manage and conserve" test for plan approval, or providing for an alternative, more specific requirement focused on "not causing harmful alternation of forest resources."

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[23] West Coast Environmental Law, *Submission from*, p. 56-57.

[24] This warning gets most explicit in writing in ForestEthics et al, June 19, 2002; Forest Caucus of the BCEN, June 26, 2002, p. 3; June 30 letter to Premier Campbell by US environmental groups.

[25] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 2.

[26] Forest Caucus of the BCEN, June 26, 2002, p. 1.

Analysis

Because of how the Code has been implemented, the precise meaning of the commitment to maintain existing environmental standards is ambiguous. Environmentalists would prefer the evaluation to be based on the intent of the existing Code, assuming it was fully implemented, and without timber supply impact caps.

It seems reasonable to interpret the commitment as the existing standards as constrained by the timber supply impact caps, because those caps are embodied in current policy. Evaluation of this commitment is complicated by the fact that so many of the environmental protection aspects of the Code are driven by unimplemented landscape level planning. But then the relevant question becomes whether the proposed results-based code will be more or less likely to implement effective biodiversity protection through landscape objectives. There does not seem to be a clear difference between the proposed and existing Code on this issue. The fact that the government intends to bring in interim objectives for key biodiversity and wildlife values, including old growth forests and ungulate winter range, and that wildlife tree retention requirements will be specified in law, could be considered an improvement over existing policy. But the authority of government officials to grant exemptions in the vital section of old forest protection is extremely broad.

The clearest statement of how the government compares the protection of environmental values in the proposed results-based code compared to those in the existing Code is contained in Companion Document 1, *Comparison of Value Management Regimes*. Table 2 summarizes the results for key environmental values.

In general, these comparisons were not specifically contested by environmental groups during the consultation process. However, given the general tone of their submissions, it is reasonable to assume that they would disagree with these characterizations. Perhaps the issue upon which they disagree the most with this form of comparison by the government is that they don't think it adequately addresses the consequences of eliminating requirements for assessments. This issue is discussed in the context of the RDP, later in the report.

Table 2

Value	Risk Compared to Existing Code
old growth representation	lower
seral stage representation	neutral to higher
landscape connectivity	neutral
temporal and spatial distribution of cutblocks	neutral
wildlife trees	neutral to lower
coarse wood debris	neutral
visual quality	neutral to lower
forest health	lower
roads	neutral
silviculture	neutral
gene resources	neutral
soil conservation	neutral
terrain hazards	neutral
community and fisheries sensitive watersheds	neutral to higher
riparian management	neutral, possibly higher
ungulate winter range	lower
identified wildlife	lower, as long as standards are delivered
resource features	neutral
lakeshore management	neutral to lower

It should be noted that COFI believes that, for 18 of the 19 forest resource values mentioned in Table 2, the proposed results-based code would be worse for industry than the existing Code, in that they would be more restrictive or costly to apply.[27] Industry's characterization is dramatically at odds with the criticisms of environmental groups that the results-based approach threatens environmental values because it reduces government oversight and delegates too much responsibility to industry.

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[27] COFI, *Discussion Paper Final Comments*, comments on Section 6, pp. 31-84.

There is a significant amount of conflict over many of the results and rules designed to protect environmental values. But perhaps the most contested and highest profile are biodiversity and riparian protection. Environmentalists see biodiversity threatened by timber supply impact caps; industry believes that current approaches to biodiversity protection are unscientific.

Environmentalists and First Nations want expanded protection of riparian areas. The federal DFO is also concerned about the level of protection given to small fish bearing streams and their tributaries, which currently don't have reserve zones. In a March 2000 letter, DOF suggested such streams should have buffers where retention levels are nearly 100%.[28] The BC government responded to the DFO's concerns about the current Code's treatment of small streams in 2001 by conducting a joint audit (involving the MOF, the MWLAP, the DFO, and the forest industry) of the effectiveness of Code riparian practices on small streams in one area of the province (the central interior plateau). The audit found that riparian practices were generally consistent with Code objectives and that the Code's objectives for small streams were effective in minimizing impacts to stream channels and fish habitat.

Recommendations

The government should review the proposed regimes for environmental values and ensure that, at a minimum, they maintain existing environmental standards.

The government should conduct, in collaboration with the expert community, a scientific review of the biodiversity guidelines and the results and rules for riparian protection. Ideally, these reviews would occur prior to the introduction of any new code. If that is not feasible, the framework should be designed to easily accommodate the results of the reviews.

4.2.4 Does the proposed results-based code reduce costs?

Reducing the costs to industry is a clear objective of the government's proposal. The statement of the results-based code's objectives begins with the goal of "reducing the transactional and operational costs to industry."

Concerns

There was a clear consensus within industry that the proposed results-based code would not result in significant cost savings for industry. According to Interfor, early in the consultation process, the current proposal will "increase operating costs, red tape, uncertainty of operations and of investment."[29] Lignum agrees: "Clearly, the delivery of this regime, as proposed, will result in an increase in costs to licensees."[30]. According to COFI, "rather than help to restore industry competitiveness, the Ministries' proposals are more likely to increase industry costs."[31] Cost drivers in the proposed model include new, more restrictive rules, potentially expanded information requirements, and costly new responsibilities, particularly in the areas of forest health and fire management.

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[28] D.M. Petrachenko, Director General, Pacific Region to Lee Doney, Deputy Minister of Forests (received March 01, 2000).

Special concerns were raised by small licensees, most notably woodlot owners and First Nations, many of whom are hoping to attain licenses in the near future. The proposed results-based code does provide for special treatment of woodlots, but representatives of woodlot licensees believe the system is still unworkable for their special needs.

Environmentalists bring a different economic perspective to forest policy. Instead of focusing on operational costs, they focus on the costs to society of environmental damage caused by forest operations.[32]

Alternatives

The most common suggestion for decreasing costs was to reduce the prescriptiveness of the results and rules so that industry would have more flexibility. COFI proposed an elaborate alternative model (discussed in other sections) that they believe would significantly reduce costs.

Woodlot licensees propose to work with government to redraft a distinctive results-based approach that better suits their circumstances.[33]

A number of suggestions were made that any additional costs imposed by new policies should be considered in adjusting the appraisal system.

Analysis

In presenting its proposed model, the government has not provided any economic analysis of potential savings from the move to its proposed model. It seems reasonable to expect that there would be some costs savings from the greater operating flexibility introduced by the streamlined planning process. However, there is no information in the record to substantiate this.

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[29] Interfor presentation to MLA committee, May 13th, Prince Rupert.

[30] Lignum, p. ii.

[31] COFI, *Response Overview Document*, p. 23

[32] Forest Watch of BC; Sierra Club of BC.

[33] Federation of BC Woodlot Associations, p. 11.

In fact, very little information exists about the costs of the existing Code. The last detailed analysis done of the costs of the Code was in 1997. It showed that between 1992 and 1996, the Code had increased logging costs by $12 per cubic metre, so that by 1996 Code costs accounted for 14% of total delivered wood costs.[34] A more recent report, a PricewaterhouseCoopers report commissioned by COFI, stated that logging costs (not including stumpage) between 1989 and 1998 have increased by $12 per cubic metre, "almost entirely the result of the Forest Practices Code."[35]

Absent from these aggregate cost estimates, however, is the share of Code costs that go to extraneous planning requirements, as opposed to the protection of environmental values. It has probably always been the case that the most significant share of the economic impact of the Code has been environmental standards, not excess process. For example, the 1997 study attempted to separate the impact of different aspects of the Code. Of the $12.22 per cubic metre of Code costs, $4.52 was credited to planning and administration, and $7.70 was credited to forest practices. Regretfully, that study has not been updated in 5 years. But that $4.50 is the maximum amount of saving one could expect, even if all planning and administration was eliminated. Other savings might be available if some of the environmental requirements could be designed to be delivered more efficiently.

Recommendation

The government should work with industry to perform an analysis of the cost implications of the proposed results-based code, and create an efficient and effective system for monitoring the costs of implementing the results-based code.

The government should consider creating a more distinctive regulatory regime for woodlots to account for their unique character.

4.2.5 Uniformity vs. flexibility - optimal precision of rules

The major thrust of the move to a results-based code is to reduce government prescription of specific practices, and give industry greater flexibility to decide how to meet specified results. Planning requirements would be reduced significantly. In developing the proposed management regime for the 17 values, the discussion paper provides a goal statement, which has no legal force, and legally enforceable results. In cases where results are not clearly measurable, or where the government thought that controls beyond the results were "needed to assert the public interest," explicit rules were proposed. In developing this regime, the government was guided by the assumption that results and rules "will be crafted to be measurable, auditable, and enforceable."

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[34] KPMG, *Financial State of the Forest Industry and Delivered Wood Cost Drivers*, prepared for the BC Ministry of Forests, April, 1997.

[35] PricewaterhouseCoopers, *The BC Forest Industry: Unrealized Potential*, (Vancouver, BC: PricewaterhouseCoopers, January 2000).

Concerns

While virtually all respondents expressed support for the principle of a results-based code, there was widespread criticism of the specific version proposed by the government.

There was general agreement that many of the results statements were vague, unmeasurable, and unenforceable. WCEL states "there is broad awareness, including within both the Ministry of Forests and industry, of the fact that the proposed Code lacks measurable, auditable, and enforceable standards."[36] The Forest Practices Board raises similar problems: "Some of the results proposed in the discussion paper are not clear and measurable. For other results, measurement will depend on having baseline information that, in many cases, does not currently exist."[37] Many industry groups and First Nations echoed these concerns about clarity and measurability.

One widely used example was the result in the Community Watershed section that practices need to be conducted to ensure that they will "maintain water quality, quantity, and timing of flow within the range of natural variability." While the range of natural variability is measurable, there are very few places in the province where there is adequate data to know what the range of natural variability is.

While there was general agreement about clarity and measurability of results, there is significant disagreement about other aspects of the framework of results and rules. Industry groups emphasize that, in addition to problems of clarity and measurability, the discussion paper "does not recognize that results must also be achievable."[38] Western Forest Products states that "a significant number of the results and rules are unmeasurable, unattainable or unreasonably restrictive."[39] In its commentary of the results and rules, COFI states over and over again that the proposed results-based code is "worse than the existing Code" because COFI believes it adds additional prescriptive rules, makes existing rules more prescriptive, or makes it more difficult to tailor site specific solutions.

Industry representatives are also concerned that the framework relies far too much on prescriptive rules. They are particularly concerned about what they characterize as a "one-size fits all approach." COFI describes this concern as follows:

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[36] West Coast Environmental Law, *Submission from*, p. 1-2. See also The Sierra Club of British Columbia, *Submission from*, pp. 3-5.

[37] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 6

[38] COFI, *Discussion Paper Final Comments*, p. 9.

[39] Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 8.

> We do not agree that results developed are enforceable. The very nature of an approach that specifies a single result for all operations on all lands in the province requires the result to be so general that it is not realistic, achievable or enforceable. The approach does not take into consideration natural variability, differing priorities, differing risks or the reality that forestry operations have impacts on the land base...An effective and efficient results based Code must allow for results that are based on regional social, economic and biological realities. It is inconsistent with the objective of providing the industry "freedom to manage" in the delivery of results.[40]

Despite this desire for greater flexibility, COFI is quite critical of the discussion paper's use of exemptions to some of its rules. It argues that "Providing for ad hoc exemptions and variances from fixed rules and results is more complex and resource intensive than allowing licensees to specify results in the initial application process."[41]

Environmentalists and First Nations are very critical of the exemptions in the proposal, as described in section 5.2.3. But rather than leaving it to licensees to develop results, they would like to see clearer, stronger results and rules, without exemptions.

Industry is also concerned that some results and rules are applied at an inappropriate level. Generally, industry would prefer that rules apply at the landscape, rather than stand level, so they have more flexibility to meet the objectives.[42]

Alternatives

Not surprisingly, the solutions offered by industry, on the one hand and environmentalists and First Nations, on the other hand, are dramatically different. Environmentalists and First Nations want clearer, more measurable results and rules. Several groups propose that the results and rules should be based on independent review by scientists.[43] To the extent that there are variations in conditions, they should be addressed by more refined rules that account for differences – for example by allowing old forest retention requirements to vary by natural disturbance type.

Industry suggests a dramatically different approach. Rather than relying on generally applicable results or rules, COFI proposes to have results developed by licensees in Forest Stewardship Plans that would be submitted to the government for review and approval. Slocan, Riverside, Weldwood and Canfor propose that results and rules should be developed in Sustainable Forest Management Plans.[44] COFI also proposed additional flexibility by suggesting a certification option, under which the certification requirements become the approved plan for that licensee.[45] In COFI's model, poor performers would be covered by a "default" status, under which they could be subjected to strict regulatory rules by the government.[46]

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[40] COFI, *Discussion Paper Final Comments*, p.33.

[41] COFI, *Discussion Paper Final Comments*, p.50. See also Lignum Limited, p. 5.

[42] Lignum Limited, p. ix.

[43] Forest Caucus of the BCEN, June 26, 2002, p. 2; ForestEthics et al, June 19, 2002, p. 6.

Analysis

Industry and environmentalists have quite different visions about how to protect forest values. Environmentalists prefer prescriptive, generally applicable rules with legal force – indeed, one of the most detailed environmental briefs provided in the process proudly endorses "command and control" regulation, a phrase almost always used in derogatory terms.[47] Environmentalists believe the discussion paper is far too flexible, and insufficiently prescriptive. Industry is opposed to generally applicable rules, and instead wants the flexibility to tailor results and rules to local circumstances. Industry groups believe the proposed results based code relies far too much on prescriptive, one size fits all rules. Their solution – to give industry the flexibility to tailor standards to local circumstances – raises alarm bells within the environmental community. Environmentalists are strongly opposed to what they see as "industry writing their own rules." They believe this would amount to "letting the fox guard the henhouse."[48]

The discussion paper adopts a particular balance between uniformity and flexibility. There are a number of results and rules that apply across the province, although many of them contain variation. For example, riparian rules vary by type of stream, and soil conservation rules depend on the characteristics of the soil. In other cases, variation is provided for by exemptions, some of which are very general. These exemptions create far too much flexibility for environmentalists, because they don't trust how they will be applied. They fear they will be used to undermine environmental standards. Industry, on the other hand, wants to get out of the rule framework altogether.

Finding the optimal precision of rules is a difficult design challenge. Box 1 describes one way to conceptualize that challenge. The major dilemma is how to design rules that match exceptionally diverse problems, while simultaneously being simple and clear. Environmentalists generally prefer the strategy of "prescriptive complexity," where rules are clearly set down in law, and variation is built in. Industry prefers the delegation models, and the COFI model is "geographic delegation," where variation

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[44] Slocan Forest Products, *Finding Solutions through Sustainable Forest Management*, p. 19, Riverside Forest Products, John Marritt, p.2, Weldwood, *enhancing public trust*, p. 8; Canfor, Final Comments on the Discussion Paper, June 28, 2002, p. 7

[45] COFI, *First Approximation of an Alternative Approach*, pp. 49-50.

[46] COFI, *First Approximation of an Alternative Approach*, pp. 35-48.

[47] Sierra Legal Defence Fund and Forest Watch, *Who's Minding Our Forests?*

[48] BCEN Forest Caucus, submission to MLA panel, June 6, 2002, p. 5.

Box 1 Criteria for "optimal regulatory precision"*

Simplicity is the number of steps involved in the decision rule.

Transparency is the clarity of the rule: in the same situation, different people will interpret the rule in the same manner.

Congruence is how well the design of the rule matches the problem it is intended to address. A congruent rule will not "overinclude" by being applied in situations where it is inappropriate, nor will it "underinclude" by failing to be applied in situations where it should.

The example of a speed limit illustrates the differences in the criteria and the dilemmas confronting efficient rule design. A uniform speed limit, such as 80 kilometres per hour, has the virtue of simplicity and transparency. It rests on a single variable that is relatively easily measured, whether by a speedometer or a radar gun. The problem is that the rule is not congruent – there may be some situations (e.g., a clear dry day with little traffic) in which higher speeds are safe, and others (snow or ice) in which only substantially lower speeds are safe. A speed limit that would attempt to address this problem of congruence, e.g., one that says "drive safely depending on the conditions," would increase problems of transparency.

Strategies for achieving congruence

Prescriptive congruence increases the complexity of the rules so that they vary to take into account all possible permutations. While improving congruence, this approach departs from simplicity, and may be administratively impractical to develop effectively, and very cumbersome to implement.

Professional delegation relies on professional discretion by delegating significant authority to foresters and other professional to adopt the practice they deem to be appropriate in the circumstance. This approach has the advantage of simplicity, but it sacrifices transparency.

Geographical delegation decentralizes authority to lower levels of an organization to decide how to tailor solutions to local situations. This approach is more complex than professional delegation, but depending on how it is designed, could be more transparent.

*Source: Colin Diver, "Regulatory Precision," In Keith Hawkins and John Thomas, eds, *Making Regulatory Policy*, (Pittsburgh: University of Pittsburgh Press, 1989).

is provided by allowing licensees to submit Forest Stewardship Plans to tailor standards to local circumstances.

In trying to strike this balance, policy makers need to take into account economic considerations of effectiveness and efficiency, but also political criteria such as legitimacy and accountability. In some cases there may be significant tensions between economic and political criteria. For example, policy design that relies on professional discretion may be economically desirable, but the lack of transparency may create significant problems with accountability. The dilemma is how to provide for the flexibility needed to address the tremendous variation of circumstances across our province's forests, while simultaneously ensuring environmental values are protected, and demonstrating that they are protected.

There may be a way to build in more flexibility without jeopardizing environmental values. Sustainable forest management (SFM) planning is one of the most important and innovative developments in forest management over the past half decade, yet the legal framework proposed in the discussion paper ignores it. At present, SFM planning is not required in BC, but companies are given clear incentive to do it because they can only access funds from the Forest Investment Account if they have SFM plans.[49]

The government could establish a basic regulatory framework that is designed to adequately protect environmental values. For those licensees who have the resources to do robust SFM planning, an option could be provided where they can substitute the results and rules they have developed for parts of the government regulatory model. But they could only be exempted from the regulatory model if they can demonstrate that they can meet or beat the environmental values provided in the regulatory model. Not all licensees may choose to do that, or have the resources to do so effectively. They would have to comply with the requirements of the government regulatory framework.

The regulatory floor could be similar to the current proposed results-based code, although consideration should be given to removing some exemptions and tightening up some of the requirements to create stronger incentives for companies to move into the SFM planning model. The code would put content requirements on the SFM plans, and they would be submitted to the government for review and approval. Once approved, they would be binding and enforceable. Perhaps the most significant challenge would be designing a workable "meet or beat" test for environmental values.

This proposal builds on the COFI model, and creates a legal bridge between the proposed results-based framework and the sustainable forest management plans envisioned as part of the process to acquire Forest Investment Account funds. It provides incentives for industry to be innovative in how to meet environmental requirements, and could facilitate coordination between government approvals and voluntary, independent certification requirements. It could also assure the public that some basic level of environmental values were being protected, while simultaneously providing companies the flexibility to adapt to their own particular circumstances.

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[49] The links between SFM planning and FIA are described on the FIA website at http://www.for.gov.bc.ca/cpp/fia/land-base.htm. The government's recommended framework for SFM planning is available at SFMP Working Group, "Working Paper: Developing a Sustainable Forest Management Plan," July 3, 2002, http://www.for.gov.bc.ca/hfp/pubs/sfmp/SFMP%20Working%20Paper%20-July%2003.doc. In the proposed results-based code documents, Companion Document #6 draws links between the SFM Planning framework and the proposed results-based code, but the concepts are not well integrated into the paper itself.

Recommendations

The government should review contested result statements to ensure that they are sufficiently clear, measurable, and enforceable.

The government should consider increasing the flexibility of the framework by creating an option whereby licensees can opt out of parts of the general regulatory framework, but only if they can demonstrate a commitment to criteria and indicators of sustainable forest management that will meet or beat the environmental standards in the regulatory framework.

4.2.6. Compliance and enforcement

Compliance and enforcement is a cornerstone in the government's proposed results-based code. The New Era commitment on revising the Forest Practices Code emphasizes compliance and enforcement – "establish a workable, results-based Code, with tough penalties for non-compliance." The proposed results-based code maintains most of the compliance and enforcement provisions of the existing Code.

Several important changes are proposed. A new statutory power is proposed, permitting the government "to intervene proactively in certain situations where a contravention has not yet occurred."[50] New requirements for notification of commencement, suspension, and cessation of operations, are proposed to facilitate inspection and monitoring. Finally, the appeal provisions are changed. The existing Code contains an administrative review provision. The results-based code proposes to replace that administrative review with review by the original decision maker. The first two changes are intended to strengthen the enforcement regime to account for the shift to a more results-based focus. The change in appeal provisions is intended to streamline what many believe has become a cumbersome and overly formal appeal process.

Perhaps the most important issue in the compliance and enforcement regime is whether or not "due diligence" will be considered as a defence when a contravention occurs. Rather than taking a position on that issue, the discussion paper outlines three potential options. Notably, this is the only section of the discussion paper where the government decided not to articulate a specific position.

Concerns

1. General

Licensees raised concerns about the general thrust of the compliance and enforcement provisions. They take issue with the objective of "strengthening the compliance and enforcement regime." They believe the existing Code already has an overly complex and punitive enforcement regime, and that their compliance performance has been outstanding.[51] Industry points to their 98% compliance, as reported by the Ministry of Forests Compliance and Enforcement Branch, as clear evidence of excellent performance.[52]

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[50] *Discussion Paper*, p. 51.

Environmentalists see an entirely different reality when examining compliance and enforcement under the existing Code. Rather than being excessively punitive, environmentalists believe enforcement has been weak. They note that the total amount of money collected in fines under the Forest Practices Code is about the same amount collected over the same period by the Vancouver Public Library in overdue fines.[53] They downplay MOF statistics, and point instead to the compliance audit of the Forest Practices Board. They note that 46% of the audits performed by the Board have uncovered at least one instance of "significant non-compliance." They are extremely concerned about the level of resources dedicated to enforcement, noting with alarm that the MOF service plan calls for a 13.5% reduction in spending on compliance and enforcement.[54] Environmentalists fear that weak enforcement will lead companies to decide to simply risk paying the modest fines as a cost of doing business.

The Forest Practices Board also expresses concern about how a results-based code will be enforced. They argue that "Enforcement will likely be more difficult, expensive, and uncertain." The Board is particularly concerned about the lack of clear and measurable results, the reduction in operational planning, and the possibility of permitting a due diligence defence.[55]

First Nations also express concern about how a results-based code will be enforced without first monitoring to assess base-line conditions.[56]

2. The due diligence issue

The most complex issue in the proposed compliance and enforcement regime is the question of whether due diligence should be a defence in cases of administrative penalties. Such a defence would mean "that a person who causes a contravention of an enactment may be excused for that contravention if that person can demonstrate that they took all reasonable care or "due diligence" to prevent the contravention."[57]

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[51] COFI, *First Approximation of an Alternative Approach*, p. 56; Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 9.

[52] Annual reports on Code compliance and enforcement are available at http://www.for.gov.bc.ca/enforce/annual_report_1999/ar1999_intro.html

[53] Sierra Legal Defence Fund and Forest Watch of British Columbia, *Who's Minding our forests?*, p. 22.

[54] Forest Watch of British Columbia, June 18, 2002, p. 12.

[55] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 15.

[56] Ktunaxa Kinbasket Treaty Council, p.2, Hul'qumi'num Treaty Group, p.6

[57] Garry Mancell, Submission to MLA Committee, p. 1.

There is consensus that due diligence is appropriate for criminal penalties in the Code. The division is on their use in the case of administrative penalties.

There is unanimity within the industry and among professional associations that due diligence should be a complete defence. COFI notes that a due diligence defence has been developed by the Supreme Court of Canada for the enforcement of environmental statutes and that prohibiting such a defence would be inconsistent with other Canadian environmental laws.[58] Licensees and industry lawyers also argue that principles of fairness and natural justice suggest that a due diligence defence should be provided. Industry lawyers point to a recent federal court case saying that not providing a due diligence defence is "not only extraordinary. It is abhorrent."[59]

There is a consensus among environmental groups that it should not be a defence. West Coast Environmental Law argues that "due diligence has no place in the administrative penalty regime," particularly when considering the reduction in the rules and advance planning proposed in the new regime. Moreover, WCEL argues that the effectiveness of sanctions as a deterrent depends on their being automatic, and due diligence defence would undermine that. WCEL is also concerned that district managers lack legal training in what constitutes due diligence. Finally, the group says the reduction in required assessments means that industry will control more of the information needed to evaluate a due diligence defence. As a result, WCEL is concerned that enforcement will be more expensive, complex, and difficult under the proposed results-based code.[60]

3. Other issues

Licensees expressed concern about the new statutory power of intervention, particularly because there are no clear criteria for its use.[61] Environmentalists support this power of intervention, but are also interested in greater clarity as to how it would be used.[62]

Industry is also concerned about the lack of termination of liability for deactivated roads. Environmentalists are concerned about the long lag times between a particular forestry activity and damage to the environment. The Forest Practices

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[58] *R. v. Sault Ste. Marie*, [1978] 2 S.C.R. 1299.

[59] *Attorney General of Canada v. Consolidated Canadian Contractors Inc (C.A.)*,[1999] 1 F.C. 209, cited in Garry Mancell, Submission to MLA Committee, p. 3. Lignum Limited, contains a detailed appendix on the due diligence defence. See also Caroline Findlay, Presentation to MLA Panel, May 28, 2002, p. 5.

[60] West Coast Environmental Law, *Submission from*, pp. 64-5.

[61] COFI, *Discussion Paper Final Comments*, p. 98; Lignum Limited, p. 24.

[62] West Coast Environmental Law, *Submission from*, p. 68.

Board shares this concern.[63] If liability is terminated prematurely, industry will not be held accountable for damage in these cases.

COFI is opposed to the way the discussion paper proposes to replace administrative reviews of decisions with reviews by the original decision maker. COFI believes this self-review is "patently unfair."[64]

Alternatives

Industry and environmentalists recommend significantly changing the approach to compliance and enforcement.

COFI recommends the following changes:

1. create positive incentives for licensees to improve performance by explicitly recognizing certification;
2. make due diligence a complete defence for all contraventions;
3. streamline the compliance and enforcement regime by eliminating administrative penalties;
4. if administrative penalties are retained, eliminate the Forest Appeals Commission role under the Code and have appeals go directly to the courts;
5. narrow the mandate of the Forest Practices Board to focus on auditing of non-certified operations;
6. terminate responsibility for deactivated roads and silviculture requirements once obligations are met;
7. eliminate "vicarious liability" that makes licensees liable for the performance of their contractors; and,
8. focus enforcement efforts on poor performers.[65]

The Forest Caucus of the BC Environmental Network recommends quite different changes:

1. ensure numerically sufficient and adequately funded full-time government employees to effectively carry out compliance and enforcement activities;
2. provide for citizen enforcement, lawsuits, and right of appeal to an administrative tribunal;
3. allocate funds to citizen monitoring and enforcement equivalent to international marketing and public relations budget (presently set at 1% of forestry revenue);
4. establish absolute liability for all administrative offences; and,
5. establish an independent enforcement body within government with provision for citizen and Forest Practices Board participation.[66]

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[63] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 17.

[64] COFI, *Discussion Paper Final Comments*, p. 98.

[65] COFI, *First Approximation of an* Alternative Approach, pp. 56-64.

[66] Forest Caucus of the BCEN, June 26, 2002, p. 2.

Analysis

As highlighted above, there is a significant disparity in how different people view the compliance record of the industry under the existing Code, with industry pointing to a 98% compliance rate, environmentalists a 46% rate of significant non-compliance. The two groups are relying on entirely different measures. The figure used by environmentalists comes from the number of Forest Practices Board audits that show an instance of "significant non-compliance." In fact, each Board audit contains the equivalent of a number of inspections. If one instance of significant non-compliance is found, environmentalists use that to characterize the entire audit. In fact, the compliance rate would be more like 19 out of 20 when using a measure comparable to that used by the MOF Compliance and Enforcement Branch. Box 2 gives an example of the large number of inspections that go into one Board audit, and an example of how those results get reported.

Moreover, the Forest Practices Board shows a significant improvement in compliance in more recent audits. In a May 2002 report summarizing the results of all of its audit, the Board states: "Over the past six years, the Board has seen a general improvement in the performance of licensees... Audit findings have shifted, from most audits having some type of significant non-compliance to report, to most audits having no significant non-compliance to report. Of the 10 audits in which the field work was done in 2000, only one had a significant non-compliance."[67] When combining the information from the MOF and the Board, the compliance rate of the BC forest industry is very high, and improving.[68] These compliance measures are no guarantee of adequate environmental performance, but they do indicate that industry has learned to work within the rules.

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[67] Forest Practices Board, *Compliance and Enforcement Audits of Forest Planning and Practices in British Columbia, 1996-2001*, FPB/SR/10, May 2002, p. 8.

[68] It should be noted that the MOF is concerned about past inconsistencies in how it quantified inspections, and the efforts underway to correct the problem may lead to lower measured compliance rates (personal communication from Dan Graham, Acting Director, Compliance and Enforcement Branch, July 3, 2002).

Box 2 **Forest Practices Board Audits: An Example**

During a compliance audit, the Forest Practices Board conducts numerous field and plan inspections to assess licensee or MOF compliance with the Forest Practices Code. The Board then concludes whether any of those (or a combination of those) inspections revealed significant non-compliance.

For example, the Board's audit of the Sunshine Coast Small Business Forest Enterprise Program (SBFEP) involved about 75 separate inspections. It included field inspections of:

- harvesting of 18 cutblocks;
- construction of five sections of road totaling 26 kilometres;
- maintenance of 88 kilometres of road;
- deactivation of 8 sections totaling 15 kilometres;
- construction of 3 bridges and maintenance of 5 bridges;
- planting of 4 cutblocks, brushing of 2 cutblocks, and pruning of 2 cutblocks;
- site preparation for planting of 3 cutblocks;
- free growing obligations on 8 cutblocks and regeneration delay obligations on 3 cutblocks; and,
- protection activities including fire preparedness planning, fuel management, and hazard abatement.*

As well, the audit examined the SBFEP's 1998-2002 Forest Development Plan, and 5 silviculture prescriptions and logging plans approved during the audit period.*

"The audit found that, except for fire protection planning and preparedness, the Sunshine Coast SBFEP forest planning and practices complied, in all significant respects, with Code requirements." In particular, the audit found:

(1) "at two of three industrial sites inspected, fire fighting tools and equipment were not sufficient to meet the requirements of the Code"; and,

(2) "seven fire preparedness plans examined did not comply with the content requirements of the Code."*

Accordingly, for this audit, 9 of the approximate total of 75 audit inspections revealed non-compliance that contributed to a single finding of significant non-compliance. In percentage terms, the Sunshine Coast SBFEP therefore scored about 80% compliance.

**Forest Practices Board, Audit of Forest Planning and Practices, Small Business Forest Enterprise Program, Sunshine Coast Forest District (October 2000).*

The issue of due diligence is very important, because it influences the incentives of companies and determines the allocation of liability between licensees and the government. The overall thrust of the results-based code proposal is to shift liability from the government to the industry, and reducing the use of a due diligence defence would be consistent with that. But the enforcement regime needs to create the appropriate incentives for industry to avoid contravening the results and rules while simultaneously meeting norms of procedural fairness. The real question is: *who should be responsible when a result or rule is contravened despite the best efforts of the regulated community?* Providing a due diligence defence would make the government responsible in those circumstances; preventing a due diligence defence would make the industry liable.

The discussion paper presents a complex and confusing intermediate approach as an option, one that reflects current practice as developed in case law by the Forest Appeals Commission. This approach distinguishes the deterrent and disciplinary component of enforcement actions from the compensatory component that is designed to compensate the crown for damage to the resource. In this case, a licensee could be found (through a due diligence defence) to not be at fault for a contravention, but still be required to compensate the government for the damage. A prominent industry lawyer argues that "to require "compensation" when a party is blameless...is unfair and indeed fosters disrespect for the law."[69]

This distinction between the compensatory and deterrence aspects of penalties needs to be reconsidered or at least reformulated.[70] It is an important policy question whether licensees should have to compensate the crown in no-fault contraventions. But compensation/deterrence distinction obscures another, possibly more important question about whether there should be a category where a licensee has been found to have contravened the Code even if they are found not to be at fault. In this case, due diligence would not be considered in whether or not a contravention occurred, but it will be considered in what kind of penalty will be levied. Given the nature of the results-based regime, the government should focus more on effective deterrence.

COFI criticizes the enforcement provisions for their overlap and duplication, and proposes the elimination of the administrative penalties provision. While COFI is correct that the Code does have an enforcement regime that was quite distinctive for its time, other Canadian jurisdictions (Ontario and Alberta) are moving towards incorporating administrative penalties into their environmental laws. Removing administrative penalties would force the government to go to court any time it wanted to issue penalties, making enforcement action far more difficult and costly.

Environmental group recommendations to provide for citizen enforcement, lawsuits, and appeals raise challenging questions about the relationship between the government and citizens in administrative processes. Citizen suits and appeals are an established feature of environmental law in the United States,[71] and some other

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[69] See also Caroline Findlay, Presentation to MLA Panel, May 28, 2002, p. 7.

[70] This distinction leads to odd reasoning in the *Discussion Paper*. In outlining the industry-preferred option of due diligence as a complete defence, the *Discussion Paper* states that if licensees demonstrated due diligence, "they would have to be compensated in those cases where they were required to take additional steps to remedy a failure to achieve the results specified in the legislation." Findlay characterizes this as "an absurd view," easily remedied with appropriate legislative language.

[71] Barton H. Thompson Jr., "The Continuing Innovation of Citizen Enforcement," *University of Illinois Law Review* 2000 (2000), 185-236; Barry Boyer and Errol Meidinger, "Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environment Law," *Buffalo Law Review* 34 (1985) 833.

Canadian jurisdictions have mechanisms that provide for a citizen role in enforcement.[72] One effect of these provisions is that they change the allocation of enforcement resources – that allocation of resources is at least in part determined by citizen groups, rather than simply by the government.[73] Under the Code, licensees can appeal some government decisions to the Forest Appeals Commission, but environmental groups or citizens cannot. The public can file complaints with the Forest Practices Board, and the Board does have the authority to appeal government decisions. Thus, the Board acts as a buffer between citizen complaints and the government.[74] If the government cannot assure the public that it has adequate enforcement commitment and capacity, pressures for greater citizen involvement will intensify.

Recommendations

The government should ensure sufficient resources are deployed to enforce the code properly.

The government should consider the certification status of companies when developing compliance and monitoring and auditing schedules.

4.2.7. Role of agencies

In section 2.1, the discussion paper outlines the role that different agencies would play under the proposed results-based regime. Under the proposed results-based code, the Ministry of Forests would retain responsibility for review and approval of resource development permits, issuance of cutting and road permits, and compliance and enforcement. The MOF would also monitor effectiveness of the code. The Ministry of Water, Land and Air Protection would lead development of best management practices, operational expectations, and standards for achieving results, and would lead establishment of legal objectives for water quality, Ungulate Winter Range and identified wildlife. The MWLAP would monitor achievement of results, and would be responsible for compliance and enforcement of environmental standards. The Ministry of Sustainable Resource Management would develop sustainable resource management plans, and would establish landscape level zones and objectives.

An important feature of the proposed results-based code is the elimination of joint statutory decisions. Under the existing Code, some decisions required joint decisions by statutory decision-makers in the Ministry of Forests and what is now the Ministry of Water, Land and Air Protection. According to the discussion paper, "a single decision-maker will allow clear focus on accountability for any authorization..." This change was intended to reduce complexity and transaction costs.

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[72] Sierra Legal Defence Fund and Forest Watch, *Who's Minding our Forests?*

[73] For an analysis of different governing institutions in Canada and the US, and their implications for forest policy, see George Hoberg, "How the Way We Make Policy Governs the Policy We Make," in *Sustaining the Forests of the Pacific Coast*, Debra Salazar and Donald Alper, eds., (Vancouver: UBC Press, 2000).

[74] Hoberg, "How The Way We Make Policy Governs the Policy We Make" p. 36.

Concerns

There was a significant amount of criticism of this section, particular from industry. While pleased to see joint decision making eliminated, COFI is extremely concerned about the blurring of roles and responsibilities between the agencies, and the absence of coordinating mechanisms. For example, its comments on old forest retention state: "The model of having two separate Ministries engaged in setting objectives and having a third Ministry, not involved in setting the objectives, monitor their application and approve activities that involve the achievement of the objectives without a coordination mechanism is ineffective and inefficient."[75] Concerns were also raised about having two agencies – the MOF and the MWLAP – involved in enforcement.

As well, COFI and other forest industry representatives believe the proposal to eliminate operational plan amendments and "gating" of approved cutblocks will increase the government's role and workload in reviewing proposed development. COFI said the absence of RDP amendment provisions "will disrupt operations and increase costs for both government and licensees. If a boundary is out by a fraction, the licensee must go through the entire RDP process to make that minor change." And, COFI said that, by removing the requirement for gating, "more resources by both industry and government [will be] spent on creating and reviewing information about areas where nothing has changed."[76]

Industry groups were also concerned about the amount of discretion held by district managers, creating the potential for significant variation among districts in how the Code is interpreted.

Environmental groups did not raise concerns about the roles of agencies proposed in the discussion paper. An exception is West Coast Environmental Law, who would like to see MWLAP play a standard-setting role for more environmental values.[77]

First Nations are concerned with the proposed code's intention to eliminate joint statutory decisions, as they feel that the MWLAP's role on issues such as community watersheds and biological diversity provides an important check and balance.[78]

As outlined in section 4.2.6 of this report, environmentalists, the Forest Practices Board, and many other members of the public expressed concern that, with diminishing budgets and resources across the three ministries, the government will have difficulty fulfilling its enforcement role under the results-based code.

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[75] COFI, *Discussion Paper Final Comments*, p. 35.

[76] COFI, *Discussion Paper Final Comments*, p. 31.

[77] West Coast Environmental Law, *Submission from*, p. 9.

[78] Council of the Haida Nation, p.6

Alternatives

Industry groups prefer a much simpler division of responsibilities, for example by having one agency per function, or at least a clearer division of labour. To reduce the government's role in reviewing proposed resource development permits, industry groups further recommend that the results-based code allow for amendments to RDPs and the continuation of gating approved cutblocks. These issues are discussed in the section on RDPs.

Industry groups suggest that the differences across districts could be addressed by having authority vested in the minister, which could then be delegated to district managers with policy direction.

As indicated in section 4.2.6 of this report, the Forest Caucus of the BCEN recommends that "the enforcement regime [include] numerically sufficient and adequately funded full-time government employees to effectively carry out compliance and enforcement activities." Other environmental groups and members of the public echoed this recommendation.

Analysis

The existing Code had joint statutory decision-making, involving two agencies. The proposed results-based code eliminates that aspect of complexity, but adds new elements by introducing a third agency, and by not making the allocation of responsibilities, and mechanisms for coordination, among the three agencies clear.

The ability of the government to fulfil its enforcement role under the results-based code is addressed in this report's recommendation that the government ensure "sufficient resources are deployed to enforce the code properly" (see section 4.2.6).

Recommendations

The government should consider simplifying its organizational arrangements for delivering the results-based code and, at a minimum, ensure that the roles and responsibilities of all government agencies are precisely defined to eliminate ambiguity and ensure smooth, orderly implementation.

The government should ensure that the legislative framework promotes consistent interpretation and application by implementing officials.

4.2.8 The resource development permit

As described in Section 4 above, one of the three pillars of the legal framework for the proposed results-based code is the Resource Development Permit (RDP). The RDP consists of a geo-referenced map that identifies proposed "development units" that indicate the general area in which licensees intend to harvest or build roads. If the licensee can demonstrate to the district manager that the RDP will meet the four tests specified, the district manager must issue the permit. The tests are:

1. development units proposed by a licensee do not conflict with other tenures or legal rights;
2. development unit locations proposed by the licensee meet each of the legal objectives established for the land use zones;
3. the licensee followed an appropriate consultation process to gather and consider information from local communities and other interested members of the public; and,
4. in community watersheds and watersheds with significant downstream fisheries values, the licensee identified terrain hazards and cumulative hydrological impacts, and properly located forest development units to avoid these hazards and impacts.

The district manager must also be satisfied that adequate consultation with First Nations has taken place.

The RDP is the main approval mechanism under the proposed new regime. It replaces the far more elaborate Forest Development Plan (FDP) in the existing Code. The Code Act and accompanying *Operational Planning Regulation* contains detailed specifications of the content of the FDP, including identifying the specific location of cutblocks and roads, and the assessments that need to be included as part of the approval process. FDPs are approved for a period of up to five years, and renewed every year or two. Once a cutblock or road location has been approved, it is given 'Category A' status for subsequent submissions, meaning there is no requirement for further consultation, review and comment in any resubmissions or amendments to the plan. This concept is called 'gating' under the existing Code.

The RDP was designed to reduce transaction costs and increase professional reliance. Requiring the identification of a development unit rather than exact locations of cutblocks and roads creates greater flexibility, reducing the need for the burdensome amendment process that has emerged under the existing Code. Removing the requirements for specific content and assessments allows licensees more freedom to decide what information is necessary to justify their proposals. The existing Code's requirements for assessments are described in Box 3.

Box 3 Assessments under the existing Code and the results-based code

Under the existing Code, assessments are required at two planning levels – at the forest development plan (FDP) stage, and at the silviculture prescription (SP) stage.

The FDP must incorporate the results of the following landscape-level assessments:

- forest health assessment;
- watershed assessment for community watersheds and watersheds with significant downstream fisheries values;
- riparian assessment for areas of joint approval; and,
- terrain stability field assessments for (a) areas of joint approval and (b) areas having a high likelihood of landslides, unstable terrain, or slope gradients greater than 60%.

The SP must incorporate the results of the following site-level assessments, where those assessments are required:

- visual impact assessment;
- terrain stability field assessment;
- gully assessment;
- pest incidence survey;
- archaeological impact assessment; and,
- riparian assessment.

The proposed results-based code does not require any landscape or site-level assessments to be completed by licensees. The discussion paper categorizes assessments as a "non-legal component of the code", and contemplates that licensees will complete assessments: (1) to create an evidentiary basis to pursue authorization of the resource development permit; (2) to help select practices that will achieve results; and, (3) to enable proof of due diligence in achieving a result.

Concerns

While licensees were pleased with the simplification of operational planning represented by the RDP,[79] they expressed concern about (1) whether it provides adequate flexibility and (2) the uncertainty of the evidentiary burden required to meet the four approval tests. Licensees were critical of the fact that the proposal does not allow amendments to the RDP, a provision they believe will unnecessarily restrict the flexibility of the system. Industry is also concerned over the loss of the

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[79] For example, COFI, *Discussion Paper Final Comments*, p. 20; Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 5.

'gating' provision under the results-based code, which provides them with security of access to previously-approved development.[80]

Industry also expressed concern about the uncertainty of what kinds of information will be necessary to satisfy the RDP approval tests, and are concerned that the information requirements may actually be heavier than those under the existing Code. In addition, industry is concerned that there are no time limits for approval or rejection of a RDP. Industry is concerned that RDP approvals need to be time limited to allow for certainty in the operational planning of licensees. Finally, industry is also concerned that there is no requirement for the district manager to provide a rationale in the event a RDP is rejected.[81]

The RDP concept may be problematic in areas of the province where there are multiple licensees operating in the same area. Licensees warn of a possible gold-rush mentality, where operators anxious to secure development rights will race to see who gets the cutting permit first. The RDP proposal contains no mechanism for adjudicating these or other competing claims.[82]

Environmentalists and First Nations are strongly opposed to the proposal that the RDP will not identify the specific location of cutblocks and roads. They believe meaningful public review and input requires the identification of specific locations.

Environmentalists are also concerned about the elimination of required assessments. WCEL states:

> Government and the public must have the information necessary to evaluate, approve (in the case of government) or comment on (in the case of the public) and monitor logging operations under the Code. This means that more detail must be required prior to government approval, and that site level planning and assessments must be required under the Code and made publicly available even if they will not be subjected to government approval.[83]

Alternatives

Industry recommends that the new regime provide for amendments to the RDP, and continue to allow 'gating' of development units.

COFI would prefer to see the RDP replaced by a broader Forest Stewardship Plan.[84] Other industry groups would prefer to replace the RDP with a Sustainable Forest Management Plan, similar to those currently being developed for various certification schemes.[85] If these plans could not be considered equivalent to the RDP, then efforts should be made to link them more effectively. These suggestions are considered more directly in section 4.2.5.

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[80] Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 7; COFI, *First Approximation of an Alternative Approach*, p. 28

[81] COFI, *Discussion Paper Final Comments*, p. 20

[82] Western Forest Products, *Summary of Operational Concerns*, p. 28

[83] West Coast Environmental Law, *Submission from*, p. 4.

[84] COFI, *First Approximation of an* Alternative Approach, p. 25.

Environmentalists and First Nations argue that it is essential to maintain the identification of the specific location of cutblocks and roads.[86] This concern could at least be partially addressed if requirements for site level plans were maintained. That issue is discussed in the next section. Environmentalists also believe there should be more mandatory content, and that the requirements for specific assessments should be maintained.

Analysis

Issues raised with the RDP reflect several of the difficult balancing acts described in the overarching themes in Section 4.1. On the one hand, protecting values in the forest through the RDP approval process requires a sufficient level of knowledge about the plans of licensees. Environmentalists are very concerned about the reduction in required assessments, and the impact that will have on the quality of government approval decisions, and their own ability to participate meaningfully. On the other hand, if too detailed a level of information and commitment to specific actions in specific locations is required, it eliminates the flexibility licensees want when they conduct operations.

The change in planning requirements represented by the RDP is perhaps the biggest departure from the existing Code contemplated by the results-based code proposal. It is somewhat surprising that the consultations did not suggest more industry support for these changes. There seem to be two reasons for this. First, industry groups prefer significantly more flexibility to develop their own plans, as discussed in section 4.2.5. Second, all else being equal, industry prefers certainty, and the more limited requirements of the RDP tests creates considerable uncertainty about what kinds of evidence will be required to support the permit applications. While environmentalists are alarmed about the loss of valuable information in the process, industry groups are concerned that information requirements may be increasing.

Recommendations

The government should clarify the evidentiary burden required to meet the Resource Development Permit tests.

The government should consider revising the Resource Development Permit to provide for minor amendments and "gating."

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[85] Weldwood, *p. 8;* Riverside Forest Products, John Marritt, p. 2; Canfor, Final Comments on the Discussion Paper, June 28, 2002; Slocan Forest Products, *Finding Solutions through Sustainable Forest Management*, p. 22.

[86] Vancouver Island Forest Watch, *Submission to Stakeholder Process, June 25, 2002*, p. 2; Nisga'a Nation, p.2,

4.2.9 Site plans

The proposed results-based code does not include the requirement for a site-level plan, contrary to the existing Code's requirement for a silviculture prescription (SP). The SP requires identification of cutblock and road locations, and the prescription of harvesting, road-building, and silviculture practices. The Code requires that field assessments be conducted to guide SP development, and allows the district manager to refer SPs to other agencies and affected members of the public where appropriate. The district manager must approve the SP before operations may be authorized.

Under the results-based code, the resource development permit (RDP) requires a map defining the outer boundaries of proposed development units, but does not require that specific locations of cutblocks and roads within those units be identified. This was deemed appropriate to avoid unnecessary amendments, and to give licensees freedom to manage within development units as long as those units meet the four RDP tests, and achieve the rules and results.

Concerns

There was general agreement among forest industry respondents that removing the requirement to submit a site level plan for district manager approval was a positive step. However, COFI expressed concern that the loss of site-level plans may impede public access to information on site-level operations. COFI says that eliminating the statutory requirement for a site-level plan "will reduce the transaction costs and operating delays currently associated with government review and approval of these plans. However it may unduly raise some public concern about lack of site level information."[87]

Environmental groups felt the loss of site-level information currently required in the SP, and in the assessments that guide site-level planning, would severely limit the district manager's ability to assess the RDP for conservation of forest resources. West Coast Environmental Law says: "the locations of roads and cutblocks, and detailed information on what logging practices are to be used... are crucial in evaluating the environmental effects of logging."[88] WCEL adds: "the major requirements for site level planning by forest companies were well established in BC long before the Code was ever introduced. The so-called Results-Based Code will push forest planning requirements in BC back several decades."[89]

WCEL also commented that the lack of site-level information required under the proposed code would make public consultation on the RDP ineffective because the public would not be able to determine whether logging operations might affect them, and would not have the legal right to request additional information to evaluate the RDP. WCEL states: "This removal of information about operations on public lands from the public domain is unacceptable."[90] First Nations had similar complaints about the effect of the lack of site level plans on the ability of licensees to consult with them.[91]

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[87] COFI, *First Approximation of an* Alternative Approach, p. 47.

[88] West Coast Environmental Law, *Submission from,* p. 21.

[89] West Coast Environmental Law, *Submission from,* p. 23.

Alternatives

As an alternative to government's proposal to eliminate the requirement for a site-level plan, COFI recommends that the requirement to prepare a site-level plan be retained but that the plan not be subject to review and approval by the district manager. COFI further proposes that site-level plans be binding on licensees and subject to enforcement by the government. COFI says that, under its alternative, "transaction costs for government and industry and operational delays are reduced but the public retains access to site level plans."[92]

The Sierra Legal Defence Fund and Forest Watch of British Columbia recommend that: "Stand-level plans...must be legally required (even if they are not subject to government approval) and must be publicly available to permit an evaluation of whether results have been achieved and if necessary to allow for compliance and enforcement activity."[93] The Forest Caucus of the BC Environmental Network further recommends that the proposed code "retain an approval standard for landscape and site level operational plans."[94]

Analysis

COFI's support for a site level plan means that there is a relative amount of consensus on adding to the results-based code a requirement for licensees to prepare site-level plans and make those plans available to the public. Furthermore, COFI supports having site-level plans be binding on licensees and subject to government enforcement. The main difference is on whether site level plans should be approved. Apparently, site plan approvals are one of the most resource intensive parts of the Code to staff, and with budget and staff cuts it may not be feasible to have them approved. But without the stick of denying approval, companies will have fewer incentives to be responsive to public concerns.

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[90] West Coast Environmental Law, *Submission from*, p. 29.

[91] Te'Mexw Treaty Alliance and First Nations Treaty Alliance p.2

[92] COFI, *First Approximation of an Alternative Approach*, p. 47.

[93] Sierra Legal Defence Fund and Forest Watch, *Who's Minding Our Forests?*, p. 15.

[94] Forest Caucus of the BCEN, June 26, 2002, p. 3.

Recommendation

The government should restore site levels plans to the framework. While there should not be a requirement for government approval, their content could be specified, they could be made public, and consideration should be given to whether they should be binding on licensees.

4.2.10 Professional reliance

The proposed results-based code is designed to place greater reliance on natural resource professionals, both in government and in industry. The discussion paper's companion document #5 outlines some of the roles of resource professionals employed by government and industry clients. The companion document describes the expected cultural shift from having legal requirements for professional signoff to having professionals, governed by their own legislation, chosen by a proponent to inform diligent delivery of resource management activities.

Under the existing Code, resource management professionals are required, among other things, to complete assessments and sign operational plans to be submitted to the district manager for review and approval. This process requirement was intended to ensure professional accountability for the quality of assessments and plans, and to ensure due diligence on the part of licensees for such things as locating cutblocks and roads, planning forest practices, and protecting environmental values.

The government's proposed results-based model does not specify what activities need to be conducted by professionals. This change is consistent with the objective of the proposed code to allow licensees freedom to manage in the delivery of results. The discussion paper contemplates that licensees will employ professionals in operational planning and other activities as a means of proving due diligence, ensuring development units meet RDP approval tests, and ensuring results are achieved.

The use of professionals is mandated in existing right-to-practice legislation for two of the four associations mentioned in the discussion paper – the Association of BC Professional Foresters (ABCPF) and the Association of Professional Engineers and Geoscientists of BC (APEGBC).

The legislation that establishes each of these Associations defines what professional practice is, and makes it illegal for anyone who is not a registered professional to perform that practice (i.e. Section 21 of the *Foresters Act*). For example, if someone other than a professional forester were to sign a silviculture prescription for submission to the district manager, that person will have committed an offence under the *Offence Act* and be liable, upon conviction, for a monetary penalty. Any activity outlined in the *Foresters Act* under the definition of "practice of professional forestry" is the sole and exclusive responsibility of a registered member of the Association. Because these legal requirements are contained in statute already, the government thought it would be redundant to include them in the proposed results-based code.

The Association of Professional Biologists of British Columbia (APBBC) has established right-to-title protection in 1987 through the *Societies Act*, but currently does not have supporting right-to-practice legislation. The British Columbia Institute of Agrologists (BCIA), established in 1949 under the *Agrologists Act*, also has right-to-title but not right-to-practice.

Concerns

Generally industry representatives did not raise concerns about the removal of professional signoff as a requirement under the proposed results-based code. The COFI alternative proposal, however, would retain requirements that plans be signed by registered professional foresters.[95] Environmental groups noted a tension between removal of the requirement for signoff and the explicit wording in the discussion paper regarding the increased reliance on professionals in forest management activities.[96] Individual foresters, in their submissions, did outline a concern over whether a consulting forester would be called back to amend a prescription for an area if a licensee is not required by law to do so.

Environmental groups are sceptical that professionals have the ability and capacity to police themselves. For example, a report by environmental groups claims that, despite the fact that every non-complying logging plan or silviculture prescription is signed by a Professional Forester, the ABCPF has been able to decide only one publicly available case involving a forester exercising duties in such a way as to potentially cause harm to the environment.[97] The environmental group report also raises concerns about the APEG, noting that a 2001 survey of competence in terrain stability assessment found that only 30% of its members surveyed prepared adequate reports. The APEG is applauded, however, for embarking on a process to address apparent low standards among their members.[98] Concerns were also raised about a potential bias among ABCPF members towards industrial forestry.[99]

Some industry groups were concerned that overly prescriptive "one size fits all" rules in the proposal would not allow sufficient professional discretion in protecting these resource values.

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[95] COFI, *First Approximation of an Alternative Approach*, p. 40.

[96] West Coast Environmental Law, *Submission From*, p. 3.

[97] Sierra Legal Defence Fund and Forest Watch, *Who's Minding Our Forests?*, p. 29; Forest Futures, p. 7. The ABCPF disputes these claims, noting among other things, the fact that the vast majority of discipline cases are resolved through alternative dispute resolution.

[98] Sierra Legal Defence Fund and Forest Watch, *Who's Minding Our Forests?*, p. 30.

[99] Herb Hammond, RPF, p. 3.

Some argued that increased professional reliance will require changes to the existing *Foresters Act*. The ABCPF proposes to amend the *Foresters Act* to improve professional reliance provisions. These amendments include clarifying the definition of professional forestry practice and the exemptions to the right-to-practice exclusions, as well as changes to discipline and enforcement powers which the ABCPF argues better enable it to deliver its mandate, regardless of the eventual design of the results-based code. Environmental groups argue that the proposed results-based code cannot work unless "strengthening disciplinary and other measures in that Act" takes place.[100] WCEL argues that the proposed amendments to the *Foresters Act* will not adequately address disciplinary measures or the legal responsibilities of a forester under that Act.[101]

Alternatives

The ABCPF strongly supports revisions to the *Foresters Act* to make it more compatible with a modern results-based forest practices regime.[102]

The APBBC recommends creating a statute establishing right to title and practice requirements for professional biologists. The ABCPF and the APEGBC support the passage of a Biologists Act to empower the association with legislated authority to establish standards governing biologists, and the relationship between biologists and other professions.[103]

With the lack of clarity provided in the discussion paper as to what would be expected under due diligence and the preparation of evidentiary information in the submission of an RDP, some foresters argue that there is a need to clarify what is to be signed by a resource management professional under the results-based code model.

Analysis

The broader issue with respect to professional reliance is what degree of shift there should be from prescription in government regulation to reliance on professional judgment. There were significant differences of opinion on this issue. The more specific issue of legislative design is about the overlap of defining resource professional practice in more than one statute. While more technical in nature, addressing these issues effectively is crucial to maintaining and enhancing the public acceptance of forest management in the province.

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[100] West Coast Environmental Law, *Submission from*, p. 71.

[101] West Coast Environmental Law, *Submission from*, p. 71.

[102] ABCPF, p. 5.

[103] ABCPF, p. 5; APEGBC, p. 10.

The *Foresters Act* and the *Engineers and Geoscientists Act* both introduce extensive definitions of the scope and exclusive right-to-practice and, if adequately crafted, should be sufficient to ensure that activities requiring professional expertise and judgment are performed by appropriate professionals. The ABCPF has proposed revisions to the *Foresters Act* to make it more consistent with a move towards greater professional reliance. The ABCPF believes it is necessary to clarify and limit the definition of practice while better describing the activities for which professional foresters are trained and have the exclusive right to carry out. The changes are designed to make the definition more enforceable, and thereby provide greater certainty to the consumers of professional services and the public requiring those professionals to be accountable.[104]

Currently, no provision for mandatory practice review exists in the *Foresters Act* other than in the disciplinary context. The APEGBC has an active Practice Review process with the ability to identify concerns about performance of their membership or standards of practice. The proposed revisions to the *Foresters Act* would establish a similar process, which the ABCPF refers to as quality assurance.

The ABCPF, APEGBC,[105] the Forestry Continuing Studies Network,[106] licensees, and individuals alike expressed concern that foresters, having worked with a prescriptive Code over the past seven years, will need a significant amount of training and counsel in the shift in the manner and mindset in which resource professionals carry out their work.

The APBBC, which has right-to-title and specialized knowledge to inform decision-makers in industry and government, proposes legislation that would allow them to regulate their membership and define the practice of professional biology. Without specific definition and an established right-to-practice, the accountability will continue to rest, inappropriately, with the professional forester preparing a plan or assessment, or monitoring performance (potentially) without expertise in that area of practice, informed by an expert with limited accountability.

Recommendation

Prior to the implementation of a results-based code, the government should ensure that appropriate requirements for professional regulation are contained in legislation for all professionals involved in delivery of the code.

4.2.11 Links to related policy issues

The results-based code is only one part of the government's larger agenda of change in forest policy. For example, new approaches to land use planning are being developed that will influence implementation of a results-based code. Those initiatives include establishment of a "working forest" land base, and establishment of sustainable resource management (SRM) plans by the MSRM. The working forest initiative will secure areas of the provincial forest where timber harvesting will be the primary land use objective. The SRM planning initiative will guide establishment of land use zones and objectives under the proposed code.

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[104] ABCPF, *Proposed Changes to the Foresters Act (Version 3)*, May 9, 2002, pp. 2-4

[105] APEGBC, p. 9

[106] Forestry Continuing Studies Network, June 27, 2002

Other government initiatives that may influence implementation of a results-based code include reforms to timber supply, timber pricing, and tenure allocation policies. These initiatives will influence the rate at which timber can be harvested, the price of timber, and the allocation of harvesting rights on Crown land. All of these initiatives will profoundly affect forest management decisions under the proposed code.

Concerns

There was widespread demand among respondents to the discussion paper to see how all of the emerging forest policies fit together. For example, respondents asked how the proposed results-based code would influence or be influenced by the Defined Forest Area Management, the Forest Investment Account, the new timber pricing system, increased corporate control over public resources, tenure reform, and revisions to the *Cultural Heritage Act* and Guidelines for Consultation with First Nations

In particular, however, the forest industry and environmental groups expressed interest in and concern about the relationship between the proposed results-based code and the working forest and SRM planning initiatives.

Industry strongly supports establishment of a working forest as a means of guaranteeing the forest industry's access to timber.[107] Environmentalists strongly oppose establishment of a working forest, one group saying: "this initiative will completely undermine the Results-Based Code. The proposal...would arbitrarily enshrine timber industry access rights to the operable forest, with minimal or no regard to the environmental values in that same forest."[108]

As indicated under Section 5.1.12, *Links to Land Use Objectives*, COFI does not support MSRMs proposed landscape level planning, and recommends that existing and new regional land use plans and land and resource management plans be the only strategic land use plans guiding operational planning.

Environmental groups strongly support SRM planning, and acknowledge its importance to protecting environmental values and delivering results under the proposed code. However, WCEL fears the MSRM's approach to SRM planning emphasizes economic development as the first priority, which could "fundamentally undermine landscape-level planning as a tool for environmental protection."[109] They go on to say: "Good planning requires planners to identify what values must be protected in an area, and the amount of timber which can be extracted while retaining those values then becomes an output of the planning process. The MSRM's proposal that landscape objectives set targets for timber production reverses this common sense approach to planning, with the level of logging becoming an input to planning and decision-making."[110]

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[107] Sunshine Coast Forest Coalition, p. 1; Coast Forest Lumber Association p. 5.

[108] West Coast Environmental Law, *Submission from*, p. 11.

Alternatives

The industry associations all strongly recommend the establishment of "timber targets" for each timber supply area and tree farm licence in the province. Industry sees this as an independent initiative, separate from SRM planning, that would result in land use objectives for timber that would guide both land use planning and operational planning under the new code."[111]

WCEL recommends that the MSRM "re-evaluate its approach to SRM planning to ensure economic development planning takes place in the context of a sound and comprehensive understanding of the ecological values which must be protected in a given area to maintain ecological integrity."[112]

Analysis

The government is embarking on massive changes in forest policy, creating a great deal of anxiety and confusion among interested parties as to the direction of government. Fundamental change is required, and it would be a mistake to hold up individual initiatives until the entire package of reforms was complete. Nonetheless, the government could do more to communicate its intended direction and highlight the links between the various changes under consideration.

4.2.12 **Links to land use objectives**

One of the three pillars of the legal framework for a results-based code is land use zones and objectives for landscape-level forest resources such as biodiversity and wildlife. Development units under the RDP must meet the objectives of land use zones. The discussion paper contemplates that it may not be possible for the government to establish land use zones and objectives before the results-based code is implemented (April 2003). Accordingly, for those zones and objectives not legally established by April 2003, interim objectives will be established for certain values.

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[109] West Coast Environmental Law, *Submission from*, p. 12.

[110] West Coast Environmental Law, *Submission from*, p. 12.

[111] NFPA , p. 13; CLMA, p. 2; COFI, *First Approximation of an* Alternative Approach, pp. 11 – 20.

[112] West Coast Environmental Law, *Submission from*, p. 13.

The MSRM is charged with developing sustainable resource management (SRM) plans that will result in the land use zones and objectives, and interim objectives.

The intent of the interim objectives in the proposal is to ensure that objectives were in place for some key values (such as old growth, wildlife trees, visuals, ungulate winter range) if no land use objectives were yet legally established. When the legal land use objectives are in place by MSRM, the interim objectives would no longer apply. As a result, these values would receive a level of protection that does not exist under the existing Code.

Concerns

Almost every individual and organization that responded to the discussion paper raised a serious concern with the lack of land use zones and objectives, or interim objectives, for forest resource values. In particular, environmental groups and the Forest Practices Board commented that, over the last several years, there has been very little progress in the establishment of land use objectives.

The Forest Practices Board says "old growth objectives have still not been established seven years after the Code was enacted."[113] West Coast Environmental Law says "planning for biological diversity has been promised under the existing Code since it was introduced. To date, relatively few landscape unit objectives have been brought into force."[114] Given the government's slow progress thus far, many respondents are sceptical that the government will complete land use zones and objectives, or interim objectives, within the next year.

Most respondents agreed that land use zones and objectives represent the most significant component of the results-based code, and will be essential to effective implementation of the proposed code. The fact that land use zones and objectives, or interim objectives, were not completed and included in the discussion paper or otherwise made available for public review disappointed most reviewers of the discussion paper. WCEL says that "no examples are provided of what even the interim objectives (which will presumably be included in the Code itself) will look like. It is therefore not possible to comment on a key area of the Code in the detail we would like. This is unfortunate and undermines our confidence in this process." [115]

Land use direction was generally acknowledged as important to the implementation of a results-based code, but COFI is concerned about the government's proposal for land use zones and objectives because "there is no description of how objectives will be set, how government direction to balance socio-economic and environmental values will be provided or what criteria will be used to set objectives."[116] COFI opposes the SRM planning that will result in land use zones and objectives because it believes that many of the existing land-use plans provide sufficient direction to proceed directly to operational planning under the Code, and that an additional layer of land use zones and objectives will creates needless duplication and conflict between existing and new land use direction over the same geographic area.[117]

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[113] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 8.

[114] West Coast Environmental Law, *Submission from*, p. 27.

[115] West Coast Environmental Law, *Submission from*, p. 27.

First Nations are concerned about who will be setting interim objectives, and how their resources may be impacted while these objectives are in place.[118]

Alternatives

Environmental groups strongly recommend that the government complete and legally establish land use zones and objectives before implementing the results-based code. The Forest Caucus of the BC Environmental Network specifically recommends: "Legally implemented landscape level objectives for biodiversity...must be in place before bringing into effect a results-based Code.... At a minimum, legally binding interim biodiversity objectives must be in place."[119] WCEL further recommends that interim land use objectives undergo public review and comment before they are implemented.[120]

The Forest Practices Board recommends that the government develop restrictive interim objectives (eg, default high biodiversity emphasis, and double-wide riparian reserve zones) to "encourage government and industry to complete landscape level zones."[121]

COFI recommends that the SRM planning process, and resulting land use zones and objectives, be eliminated and replaced with the requirement that operational plans under the results-based code be consistent with existing and new regional land use plans and land and resource management plans.

Analysis

The absence of land use zones and objectives under the proposed results-based code is of critical concern to most groups and individuals who responded to the discussion paper. Land use objectives were a critical element of the existing Code, and they have not been delivered except in a few locations. Despite significant efforts, landscape level planning has been implemented in only 16 of the 1248 landscape units identified in the province.[122]

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[116] COFI, *Discussion Paper Final Comments*, p. 16.

[117] COFI, *First Approximation of an Alternative Approach*, pp. 21-22.

[118] Hamatla Treaty Society, p.2

[119] Forest Caucus of the BCEN, June 26, 2002, p. 1.

[120] West Coast Environmental Law, *Submission from*, p. 27.

[121] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 11.

Land use zones and objectives are a far more important component of the results-based proposal than they are under the existing Code. In the absence of these objectives, under the existing Code there are a number of process protections, such as required assessments, agency and public referrals, and the "adequately manage and conserve" test, that can be brought to bear by the district manager to consider how to protect resources in the absence of higher level guidance. These process requirements would disappear in the proposed code. One of the justifications for that is that clear land use objectives will provide measurable, enforceable results to protect values.

It is thus imperative that land use objectives be delivered in a timely manner.

Recommendation

The government should establish clear timelines, and provide strategic direction and adequate resources to the land use processes that guide forestry operations to ensure that they are completed in a timely manner.

The government should put in place legally binding interim biodiversity objectives prior to the implementation of the new code. The interim objectives should be subjected to a public consultation process before they are brought in to force. To the extent feasible, this should be coordinated with the recommended scientific review of the biodiversity objectives.

4.2.13 Consultation under the proposed results-based code

The proposed results-based code requires that licensees consult with the public before submitting a resource development permit for district manager approval. In particular, the third RDP approval test requires that "the person applying for the permit has solicited information from the public and has considered any information received respecting the proposed forest development units."[123]

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[122] http://www.for.gov.bc.ca/vancouvr/district/sunshine/planning/LUP/index.htm; http://www.for.gov.bc.ca/ftp/Prince_Rupert_Region/Bulkley-Cassiar/external/!publish/LUP's%20Sept%201999/

The majority of the landscape level plans are expected to be declared in the 2003 to 2005 fiscal years, contained in an SRMP area that includes several landscape units (Source: MSRM Regional Service Plans, 2001/02 to 2004/05).

[123] *Discussion Paper, Appendix 2 – Draft of Legislation for Resource Development Permit Content and Approval Tests*, p. 55

Under the existing Code, the requirements for public consultation are more prescriptive. The *Operational Planning Regulation* requires a licensee to make its forest development plan available for public review and comment for 60 days. Any assessments supporting the FDP must be made available to the public upon request. A person's opportunity for review is only adequate if it is commensurate with the nature and extent of that person's interest in and right to use the area under the plan. The licensee must consider all public comments received and make any revisions to the proposed FDP considered appropriate. The licensee must include, with the submitted FDP, copies of all comments received and a summary of revisions made.[124]

The much less prescriptive public consultation requirements under the proposed results-based code are intended to give licensees the freedom to determine the type and level of public consultation necessary to meet the third RDP approval test. The discussion paper contemplates that licensees will consult with the public well in advance of preparing the RDP. The discussion paper also indicates that public consultation on the RDP will not be a forum for debating land use decisions.[125]

The sustainable resource management planning process underway by the MSRM, which will result in land use zones and objectives under the results-based code, will include a public consultation process. The public will have "clearly defined and time-limited consultation for each [planning] process."[126]

Concerns

There is a general concern among forest industry respondents that the discussion paper does not specify public consultation requirements, leaving the evidence required to meet the third RDP approval test unknown. COFI says "leaving the consultation requirements entirely unspecified will leave licensees with considerable uncertainty and the possibility of delays in permit approvals. It is not clear what the public will be expected to comment on, no scope whatsoever is provided, making it worse than the existing Code."[127]

While supportive of public consultation on operational plans, COFI is concerned about the practicality of consulting with the public well in advance of RDP preparation. COFI says "it is impossible for public consultation to be completed before the RDP is prepared."[128]

Environmental groups and many individuals are highly critical of the public consultation provisions of the proposed results-based code, and are particularly concerned about the loss of requirements for specific assessments and site level plans. They strongly believe that these two elements are essential to meaningful public consultation.

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[124] Forest Practices Code, *Operational Planning Regulation*, June 1998, sections 27-30.

[125] *Discussion Paper*, p. 14.

[126] *Sustainable Resource Management Planning, A Landscape-level Strategy for Resource Development* (May 2002), p. iv.

[127] COFI, *Discussion Paper Final Comments*, p. 28.

[128] COFI, *Discussion Paper Final Comments*, p. 28.

The Sierra Club of BC states the "nature and depth of information that will be available to the public – and even government – verges on meaningless in the proposed RBC."[129] Site-specific details are not required in a RDP submission, so site-specific consultation on cutblock boundary location and roads cannot occur.[130] Vancouver Island Forest Watch adds that access to detailed plans under the existing Code, including the FDP, silviculture prescriptions, and assessments, enables its members to "study forestry plans and try to improve them by offering local knowledge about public values that may be impacted."[131] According to Forest Futures, the lack of information in the RDP will prevent the public from knowing "what will really be happening on the ground and what the impacts will ultimately be."[132]

The Forest Practices Board supports the discussion paper's proposal to involve the public well before RDP preparation, rather than only after the RDP is prepared. However, the Board finds that "the proposed public involvement under the results-based code is not adequate. The discussion paper does not propose an effective way to engage the public, and it does not provide a goal or result against which to evaluate whether public involvement is effective or adequate." [133]

The Board also expressed concern that public consultation under the existing Code has not been successful because of the absence of landscape-level plans. The result has been that "landscape level issues are being debated and decided in FDPs. Some members of the public are submitting concerns about landscape-level issues during FDP reviews, when licensees do not have the authority to address or resolve these issues." The Board is concerned that, if the public is not adequately involved in setting land use zones and objectives, "these [landscape-level] issues will surface during consultation on RDPs, leaving us in the same situation that currently exists for FDPs."[134]

Alternatives

Environmental groups recommend far more specific requirements for public consultation by establishing "results" that a public consultation process must adhere to.[135] Professor Stephen Sheppard, an expert in public consultation, supports this idea. While he does not believe specific public involvement methods should be prescribed in the proposed code, "clear and measurable performance standards should be provided [that answer the question] what does adequate or effective public involvement mean?"[136]

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[129] The Sierra Club of British Columbia, *Submission from*, June 20, p. 7.

[130] West Coast Environmental Law, *Submission from*, p. 28.

[131] Vancouver Island Forest Watch, *Submission to Stakeholder Process, June 25, 2002*, p. 2.

[132] Forest Futures, p. 7.

[133] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 12.

[134] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 9.

The Board makes three key recommendations:

- RDPs identify the approximate boundaries of where they expect to operate, while still allowing flexibility in the final boundaries once the licensee gets out on the ground;
- Licensees consult with the public during development of a RDP, document how public concerns have been addressed, and notify the public and provide reasons once a RDP is approved; and,
- Licensees document their commitments made to the public as a result of public consultation, in order to get RDP approval.[137]

COFI recommends that the government establish standards for public consultation under regulation that are more flexible than current standards, allowing time frames and levels of consultation to be congruent with the risk to resource values and other public interests while providing certainty in a maximum time frame and guidelines as to what is considered adequate consultation.[138]

Many in the forest industry also suggest that public consultation on certification initiatives be combined with consultation on operational plans that require government approval.[139]

Analysis

Many groups and individuals who responded to the discussion paper raise the point that effective public consultation under the results-based code will be essential to achieving the government's stated objective of "maintaining and enhancing the level of public acceptance of forest management."[140]

Many licensees acknowledge the value of public involvement in planning. For example, Weldwood states that "public advisory groups are the greatest benefit" of the certification activities they have been involved in.[141] One of the four elements of Canfor's vision of performance-based forest management is "a commitment to meaningful public participation in operational planning."[142]

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[135] West Coast Environmental Law, *Submission from*, p. 29; Forest Caucus of the BCEN, June 26, 2002, p. 2.

[136] Dr. Stephen Sheppard, p. 5.

[137] Forest Practices Board Comments on the Government's discussion paper, June 2002, pp. 13-14.

[138] COFI, *First Approximation of an* Alternative Approach, p. 40.

[139] Western Forest Products, *Discussion Paper Submission to G.Hoberg Commitee*, p. 9.

[140] Forest Practices Board Comments on the Government's discussion paper, June 2002, Stephen Sheppard, West Coast Environmental Law, *Submission from*.

Recommendation

The government should clarify and define public consultation objectives and processes for the results-based code.

4.2.14 First Nations and the results-based code

In introducing the proposed results-based code, the government stated that it "is committed to addressing First Nations issues regarding forestry activities in the province and the relationship of those activities to their interests" and that "government will continue to meet its legal obligations with respect to First Nations."[143] However, First Nations and their concerns are not addressed in any detail by the discussion paper. Much of the discussion paper deals with resource values that are important to First Nations, but the special relationship of First Nations to these resources, including their constitutionally protected aboriginal rights to use and access them, are not explicitly addressed in any detail.

In addition to that general commitment to address First Nations issues in the introduction to the discussion paper, reference to issues of distinctive concern to First Nations occurs in only two places. In discussing the RDP, the paper states that "The district manager may refuse to issue a RDP if not satisfied that consultation with First Nations has been consistent with the requirement of the MOF consultation policy and guidelines."[144] Second, one of the 17 specific values addressed is "cultural heritage resources." That section contains the following goal statement: "Cultural heritage resources will be identified and appropriate management mechanisms established before forest or range practices may impact cultural heritage resources." In addition, there are two results specified:

- The resource is to be managed in accordance with the *Heritage Conservation Act* where the resource is an archaeological site; and
- The resource is to be managed in accordance with the legislation or with written direction from the district manager if it is not an archaeological site.

The effect of this section is to eliminate the legal requirement for an archaeological impact assessment in the existing Code.

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[141] Weldwood, *enhancing public trust*, p. 19.

[142] Canfor, Final Comments on the Discussion Paper, June 28, 2002, p. 5.

[143] *Discussion Paper*, p. 1

[144] *Discussion Paper*, p. 11.

Concerns about the proposed results-based rode

In their oral and written submissions, First Nations raised a broad spectrum of concerns with the proposed code, ranging from ecological concerns such as a desire for ecosystem-based management,[145] and concern with the sweeping exemptions available to licensees in the old forest results section;[146] to economic concerns about costs and responsibilities being transferred from the government to industry, rather than resulting in a net savings;[147] to accountability questions regarding auditing of baseline conditions to ensure that impacts from licensees practices can be determined.[148] As these concerns have also been addressed by submissions from other groups, this section will focus on concerns that were distinctive to First Nations.

First Nations primary concern about the proposed results-based code is its lack of attention to their aboriginal rights and title. First Nations contend that they have unextinguished aboriginal title and rights over all land that is managed by the MOF and licensees.[149] Aboriginal rights are constitutionally protected under section 35(1) of Canada's 1982 *Constitution Act*. Yet First Nations argue that their rights and title are given lower status than other legal rights in the proposed code.

For example, in the draft legislation for the RDP tests, a legal requirement for approval is that "the proposed forest development units do not conflict with tenures or other legal rights *granted by the Province* in the area covered by the permit" (emphasis added).[150] This excludes aboriginal rights and title, which are not granted by the Crown, but arise from common law. First Nations see nothing in the proposed legislated framework to protect First Nations rights.[151]

Specific rights mentioned by First Nations that the proposed code is seen to affect detrimentally are medicinal and food plants, wildlife such as elk, and old growth red and yellow cedar.[152]

The second major concern First Nations have with the proposed results-based code is its limited attention to consultation.[153] The draft legislation for RDP tests states that

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[145] Council of the Haida Nation , p. 3; Little Shuswap Indian Band, p.8.

[146] Ditidaht Huu-ay-aht Shared Territory Board, p. 11.

[147] Samahquam Nation, p. 4.

[148] Council of the Haida Nation, p. 4; Hul'qumi'num Treaty Group, p. 6.

[149] Shuswap Tribal Council, p.1; Te'Mexw Treaty Alliance and First Nations Treaty Alliance, p.1; Council of the Haida Nation, p.1; Ktunaxa Kinbasket Treaty Council, p.2.

[150] *Discussion Paper*, Appendix 2 p.55.

[151] Te'Mexw Treaty Alliance and First Nations Treaty Alliance, p.2; Ditidaht Huu-ay-aht Shared Territory Board, p.6; Hamatla Treaty Society, p.1; Little Shuswap Indian Band, pp.3-8; Council of the Haida Nation, p.1.

[152] Hamatla Treaty Society, p. 2; Cowichan Tribes, p. 1; Hamatla Treaty Society, p.2.

"the district manager may refuse to approve a RDP if satisfied that consultation has not been consistent with the requirements of the MOF consultation policy and guidelines, as specified in writing by the Minister from time to time."[154] Concerns were raised that existing consultation policy does not reflect recent legal developments, particularly the cases involving the Taku River Tlingit and the Haida.[155] Decisions in these court cases have strengthened the requirement of the government, and licensees, to consult even where aboriginal rights and title have not been conclusively established in court. In particular, the Haida case extends consultation obligations to licensees, and suggests that greater efforts toward accommodation need to be made when the merits of the title claims appear strong.

Concerns were also raised that the government consultation guidelines are being revised without the input of First Nations.[156]

The most important difference from the existing Code from a First Nations perspective is that the proposed code does not require approval of plans showing exact locations of cutblocks and roads. In the existing Code, both the forest development plan (FDP) and the silvicultural prescription (SP) include site level details, and licensees are required to consult with First Nations on these plans as part of the approval process. Without site level details, First Nations believe they will not be able to adequately assess what cultural values or rights may be impacted. As a result, the potential for infringement of aboriginal rights would increase. Many First Nations groups said explicitly that they will not approve any development plan without site level details.[157]

First Nations remind the government that it will remain legally accountable, and hence it must actively ensure that there will be no unjustifiable infringement of aboriginal rights as a consequence of these sweeping changes to forest policy.[158] First Nations are adamantly opposed to the amount of discretion given to the district manager, "a low level bureaucrat," to make decisions with constitutional level implications, such as whether consultation has been satisfactory.[159]

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[153] Te'Mexw Treaty Alliance and First Nations Treaty Alliance, p.2; Forest Practices Board Comments on the Government's discussion paper, June 2002, pp. 25-26; Ktunaxa Kinbasket Treaty Council, p.5; Little Shuswap Indian Band, p.3; In-SHUCK-ch Council, p.2; Tsleil-Waututh Nation, p.2; Squamish Nation, p.1.

[154] *Discussion Paper*, Appendix 2 p. 56.

[155] Forest Practices Board Comments on the Government's discussion paper, June 2002, p. 23; Te'Mexw Treaty Alliance and First Nations Treaty Alliance, p. 2. The cases are *Haida Nation v. B.C. and Weyerhaeuser*, 2002 BCCA 147; and, *Taku River Tlingit First Nation v. Ringstad et al*, 2002 BCCA 59.

[156] Ditidaht Huu-ay-aht Shared Territory Board, p. 8.

[157] Nisga'a Nation, p. 2; Ktunaxa Kinbasket Treaty Council, p. 4; Hul'qumi'num Treaty Group, p. 5.

[158] Ktunaxa Kinbasket Treaty Council, p. 3; Little Shuswap Indian Band, pp. 3-8.

[159] Hamatla Treaty Society, p. 1; Tsleil-Waututh Nation, p. 2; Hul'qumi'num Treaty Group, p. 4.

First Nations also note the international level commitments of the governments to indigenous people through agreements such as the 1992 United Nations Convention on Biological Diversity. The Convention recognizes the role that Indigenous Peoples must play as a prerequisite to conservation and sustainability of forest biodiversity.[160]

In addition to these national and international level responsibilities, some First Nations have entered into specific agreements with the Province of British Columbia that require the government to consider and accommodate their concerns. The Ditidaht First Nation has a Memorandum of Understanding and the Huu-ay-aht First Nation has an Interim Measures Agreement with the Province. These First Nations do not feel that the government has upheld its commitments to these agreements through its development of the proposed results-based code.[161] The Tseil-Waututh Nation has a similar complaint regarding its Cooperative Forestry Agreement with the Ministry of Forests.[162]

The proposed results-based code also creates special problems for the Nisga'a Treaty, where certain elements of the Treaty are based on obligations under the existing Code that would be changed in the proposed new regime. In order for the code to apply to Nisga'a lands, tripartite negotiation and agreement would be required to amend the treaty. The Nisga'a do not intend to enter into such a process.[163]

Concerns are also raised about the land-use planning regime suggested in the discussion paper. Many First Nations stated that it is necessary for them to be actively involved in the development of land use zones and objectives. They feel that it is the responsibility of the government to provide adequate resources to make this possible. They are also worried about possible impacts on their cultural resources when interim objectives are in place, and hence they feel that they should also be involved in developing interim objectives.[164]

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[160] Little Shuswap Indian Band, p. 9; Squamish Nation, p. 2; United Nations Convention on Biological Diversity, 1992. Article 8j of the convention states that signatories will: "Subject to its national legislation, respect, preserve, and maintain knowledge, innovations and practices of indigenous and local communities, embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices, and encourage the equitable sharing of benefits arising from the utilization of such knowledge, innovations and practices."

[161] Ditidaht Huu-ay-aht Shared Territory Board, p. 4.

[162] Tsleil Waututh Nation, p. 3.

[163] Letter to Tom Lee, Manager, Treaty Negotiations, Ministry of Forests, from Sandy Kovacs of Grant Kovacs Norell, re Nisga'a Treaty Negotiations, June 24, 2002.

[164] Ditidaht Huu-ay-aht Shared Territory Board, p. 9; In-SHUCK-ch Council, p. 1; Tsleil-Waututh Nation, p. 2; Little Shuswap Indian Band, p. 2; Ktunaxa Kinbasket Treaty Council, p. 2; Hul'qumi'num Treaty Group, p. 4; Hamatla Treaty Society, p. 2.

The cultural heritage resources section of the proposed code is especially relevant to First Nations, although there is no direct reference to First Nations in this section. First Nations concerns with this section are as follows:

- The proposed code does not require an archaeological impact assessment as the existing Code does;
- The only cultural heritage resources referred to in the discussion paper are archaeological sites. There are no provisions for traditional use sites, spiritual sites or other culturally sensitive sites, resources, or values;[165]
- The discussion paper refers to the *Heritage Conservation Act*, which is a concern because this Act is currently undergoing changes. Further, this Act in its current form does not adequately address First Nations rights;[166] and
- The proposed code transfers accountability for cultural heritage resources to licensees without requiring archaeological impact assessments that the existing Code requires.[167] This leads to the following important questions:
    - How will licensees get the data required to protect these resources?
    - Without adequate baseline data, how can impacts be judged?
    - How will the MOF address the need for education of licensees regarding cultural values?

Given that forest practices of licensees are likely to affect important resources for First Nations, some feel that they should be part of the compliance and enforcement regime. They also insist that penalties incurred as a result of such impacts should go directly towards mitigation.[168]

First Nations are also concerned that the proposed results-based code ventures much too far in the direction of corporate control and privatization of the forest land base. They feel that this will make it more difficult to resolve land claims issues via treaties or interim measures agreements.[169]

Concerns about the consultation process for the proposed results-based code

All First Nations that submitted written briefs said they were not adequately consulted regarding the proposed code. They argue that the process did not meet the government's legal and fiduciary obligations of meaningful consultation.

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[165] Ditidaht Huu-ay-aht Shared Territory Board, p. 12.

[166] Ditidaht Huu-ay-aht Shared Territory Board, p. 24; Hamatla Treaty Society, p. 4; Hul'qumi'num Treaty Group, p. 3.

[167] Ktunaxa Kinbasket Treaty Council, p. 3; Hamatla Treaty Society, p. 4; Cowichan Tribes, p. 2.

[168] Hamatla Treaty Society, p. 5.

[169] Haida Nation, p. 1; Tsleil-Waututh Nation, p. 2; Little Shuswap Indian Band, p. 1.

Many First Nations felt that they did not have adequate time to respond to the discussion paper. Some did not know of the discussion paper until a few days before their meeting with Dr. Hoberg and the MOF. After the meeting, they had only a few days to submit written comments. They felt this was "woefully inadequate."[170]

First Nations feel strongly that they should be directly involved in the development of draft legislation for the results-based code, due to their government-to-government relationship with the Province. Further, they feel that it is critical that they be involved in the development of any new consultation guidelines, either generally or specifically related to the code.[171]

Several First Nations commented on concurrent changes to natural resource policy and legislation occurring "secretly" by the provincial government. They feel that these policies and laws will interact with the proposed code and, as such, they cannot judge its impacts independently. Thus, they feel that the results-based code should not be finalized until these other Acts and policies are in place, especially the new consultation guidelines and the *Heritage Conservation Act*.[172]

Several First Nations mentioned that they do not have the capacity to review and respond to these drastic changes in forest policy. It was suggested that government should provide funding in order to develop such capacity.[173]

Some First Nations felt that the staff and consultants conducting the public review were inadequately informed regarding issues of consultation and aboriginal rights. The Tsleil-Waututh Nation stated that "Neither MOF staff nor Dr. Hoberg were able to provide us with information on our key issues".

Alternatives

Many First Nations strongly feel that additional, more formal consultations about the results-based code should be conducted before the enactment of legislation. The First Nations Treaty Negotiations Alliance specifically requests a meeting with the Premier and Ministers involved in the results-based code.

First Nations that have developed their own consultation guidelines that exceed the government's requirements argue that licensees should be required to consult with each First Nation on whose traditional territory they plan to operate according to that Nations' own guidelines.[174]

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[170] Ditidaht Huu-ay-aht Shared Territory Board, p. 1; Tsleil-Waututh Nation, p. 3; Squamish Nation, p. 1; In-SHUCK-ch Council, p. 1; First Nations Treaty Negotiations Alliance, p. 1.

[171] Te'Mexw Treaty Alliance and First Nations Treaty Alliance, p. 11; Hul'qumi'num Treaty Group, p. 2; Samahquam Nation, p. 4; In-SHUCK-ch Council, p. 1; Shuswap Tribal Council, p. 1.

[172] Ditidaht Huu-ay-aht Shared Territory Board, p. 6; Ktunaxa Kinbasket Treaty Council, p. 2; Hul'qumi'num Treaty Group, p. 2.

[173] Ktunaxa Kinbasket Treaty Council, p. 1; Squamish Nation, p. 2; Cowichan Tribes , p. 1.

Other First Nations recommend that they should be given the opportunity to develop their own goal statements, results, and rules for values important to them, and that these should be added to the code before it is finalized.[175]

Many First Nations recommend that sufficient site level information must be included in the RDP or other mechanisms to allow First Nations to evaluate infringement on their rights, and to put in place mechanisms to avoid infringement. First Nations point out that the government obligation goes beyond consultation to include accommodation.[176]

Other suggested measures include:

- Funding to enable First Nations to undertake community consultation, traditional use studies, and review of proposed logging operations;
- Expand Section 2(2)d of the legislation for RDPs to ensure First Nations legal rights have at least the same status as other legal rights, and to recognize the unique constitutionally protected status of Aboriginal rights; and
- Put the onus on the licensee to prove that its activities will not undermine proven/claimed aboriginal title before logging is approved. [177]

Such measures would help to ensure that licensees and the government fully and meaningfully consult with First Nations at all levels of planning and decision making and that, in so doing, they supply First Nations with sufficient information to make informed decisions regarding resources in their traditional territories, before the approval of any proposed developments.[178]

Analysis

This consultation was designed to solicit input from stakeholders and the general public on the government's discussion paper. In some ways, it was not well suited to informing First Nations about the government's proposal, and receiving their input. There were meetings with a significant number of First Nations – 23 in total, in four separate locations, although all but two were in the Vancouver Forest Region. Several other First Nations submitted written material. With the exception of two of these First Nations, the meetings were held the last week of the consultation period. Many were just learning about the discussion paper for the first time, and were very troubled by the suggestion that they only had several days to provide written input. Clearly, a consultation process organized around a website is less suitable for many First Nations who live in remote areas and lack ready access to the internet.

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[174] Ditidaht Huu-ay-aht Shared Territory Board, p. 9.

[175] Ditidaht Huu-ay-aht Shared Territory Board, p. 9.

[176] Haida, p. 7.

[177] West Coast Environmental Law, *Submission from*, p. 38-39.

[178] Ditidaht Huu-ay-aht Shared Territory Board, p. 7.

First Nations believe they are entitled to a different, more formal type of consultation, more consistent with a government-to-government relationship.

Much of the spirit of the proposed results-based code is a shift to greater reliance on licensees, including consultation with the public and First Nations. While the issue is currently under review, the BC Court of Appeal decision in the Haida case extends consultation obligations to licensees. Nonetheless, the primary obligation for First Nations consultation still rests with the government.

Many groups and individuals commenting on the discussion paper raised concerns about the loss of site level information and plans. Because of the nature of their rights in forest lands, this issue is particularly important to First Nations. This is additional justification for restoring site level plans, as recommended in section 4.2.9 of this report.

The development of a results-based code is not the appropriate vehicle to address the extremely complex, challenging issues confronting the province and its relationship to First Nations. Nonetheless, revisions to the Code should not increase the risk of unjustified infringement of aboriginal rights and title, jeopardize recent positive developments, or create new obstacles to better, more productive relations with First Nations.

Recommendations

The government should conduct additional discussions with First Nations prior to finalizing the results-based code policy decisions.

The government should ensure that adequate information is available to enable First Nations to adequately assess the impacts of proposed development on their cultural values and aboriginal rights and title.

The government should ensure the consistency of the results-based code with any consultation requirements as defined by the Courts

5.0 Continuous improvement of the results-based code

A major theme of the consultation process is the dilemma of how to design a forest practices regime to provide for variability across space. While providing for variability across time is also vital, it received far less attention in the consultation process. To be effective, policies need to have built into them mechanisms to monitor effectiveness and adapt to new information or changing conditions.[179]

To its credit, the government proposes to introduce a "continuous improvement process" when it introduces results-based code legislation. Their proposal is outlined in Companion Document 4. The process will consist both of monitoring for effectiveness, and a process of incorporating changes:

> The effectiveness assessment process will enable periodic assessment of the effectiveness of the new forest practices legislation and will trigger improvement to the legislation where goals and objectives for values are not being met. This process will use a "manage-by-data" approach to the evaluation of the effectiveness of forest practices legislation and regulation.

This proposal is very promising. Indeed, the development of a results-based code would have been far better informed had this sort of process been put in place when the original Code was introduced. Many of the recommendations made in this report call for more analysis or scientific review of various components of the Code framework. If an effective continuous improvement process had been in place, some of these uncertainties would already have been addressed. Moreover, such a process might have improved the government's ability to learn from the multitude of innovative programs it has introduced over the past 7 years, such as the Innovative Forest Practices Agreements, the Enhanced Forest Management Pilot Projects, and especially the Results-Based Forest Practices Code Pilot Projects.

Given the uncertainties surrounding so many aspects of forest management, and the general shift to managing for results instead of relying on advanced planning or prescriptive rules, it is particularly important that an effective, strategic, and adequately resourced program of monitoring and adaptive management be put in place.

Recommendations

The government should, in collaboration with the expert community, co-operatively develop an effectiveness, evaluation, and monitoring framework for all code values, and report publicly on the results of those evaluations.

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[179] See for example, Kai N. Lee, *Compass and Gyroscope: Integrating Science and Politics for the Environment*, (Washington, DC: Island Press, 1995). In the specific context of forest management, these ideas are developed by Barry Mulder, et al, *The Strategy and Design of the Effectiveness Monitoring Programs for the Northwest Forest Plan*, PNW-GTR-437, Portland, OR: US Department of Agriculture, Forest Service, Pacific Northwest Research Station.

6.0 Conclusion

As discussed in section 4.2.1, virtually all respondents argued that there was inadequate time for consultation, and that additional consultations should be conducted prior to introducing legislation. Indeed, some prominent stakeholders came to an agreement that this phase of the consultation process "should be followed by a second phase of consultation on the development of the new Code framework."[180]

The government should be credited for the openness and transparency of this consultation process. In addition, by laying out a specific framework in the discussion paper, the government made clear its intended direction, and provided an effective focus for public deliberation and debate.

However, given the depth and breadth of the concerns expressed throughout the consultation process, the version of the results-based code proposed in the May 1 discussion paper does not adequately meet the objectives established by the government. Further policy development and consultations are necessary before legislation should be introduced.

Recommendation

The government should conduct additional discussions with First Nations and various groups to revise the results-based code proposal. To this end, the government should also work with the forest industry, the ranching sector, the woodlot community, and environmental organizations, and any other parties it deems appropriate.

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[180] Letter to George Hoberg, from Peter Baird (Canadian Forest Products), Jessica Clogg (West Coast Environmental Law), Gavin Edwards (Greenpeace Canada), Dennis Fitzgerald (Weyerhaeuser), and Troy Hromadnik (Tembec), July 15, 2002.

Appendix A

Stakeholder Consultation Process

The Discussion Paper was released May 1, 2002, at the same time the government announced the Dr. George Hoberg would be conducting technical meetings with specific stakeholders, as well as compiling all comments in a report for government this summer. It took stakeholders some time to review and express interest in meeting with Dr. Hoberg, with most wanting to meet in the last week of June prior to the June 30th deadline for submissions

The meeting format was generally informal, and involved a brief overview of the process and expectations of the meeting by Dr. Hoberg prior to each stakeholder's presentation. Dr. Hoberg requested that written brief were required prior to meetings. At each meeting, Dr. Hoberg was assisted by Glenn Farenholtz, RPF, as well as technical staff from the three agencies involved in the result-based code proposal.

Stakeholder Meetings

May 29
Vancouver
Forest Caucus of the BC Environmental Network
Forest Practices Board

June 5
Vancouver
Dr. Gordon Weetman, UBC
Dr. Ken Lertzman, SFU
Dr. John Barker, UBC
Dr. Paul Wood, UBC
Dennis Bendickson, UBC
Dr. Kevin. Lyons, UBC
Weyerhaueser
Canadian Forest Products

June 7
Vancouver
Association of BC Professional Foresters

June 10
Williams Lake
Cariboo Lumber Manufacturer's Association
Federation of BC Woodlot Associations

June 11

Prince George

Northern Forest Products Association
Slocan Forest Products
Slocan/Canfor Ft. St. John Pilot Project

June 12

Smithers

Bulkley Forest District - RBC Pilot Project
Office of the Wet'suwet'en
Northwest Natural Resources Network
Bulkley Valley Communities Coalition
ForestEthics

June 13

Hazelton

Office of the Gitxsan Hereditary Chiefs

June 18

Kelowna

Interior Lumber Manufacturers Association
Riverside Forest Products, Results Based Pilot Project

June 19

Vancouver

Canadian Forest Products
Truck Loggers Association
Sierra Legal Defense Fund
ForestWatch
West Coast Environmental Law
Greenpeace/NRDC/Rainforest Action Network/Forest Ethics

June 20

Victoria

Consulting Foresters of BC
Forest Futures
Sierra Club of Canada, BC Chapter
Association of Professional Biologists of BC
Carmanah Forestry Society
Recreation Resources Ltd, Jeremy Webb

June 24

Nelson

Herb Hammond, Silva Forest Foundation
East Kootenay Environmental Society

June 25

Nanaimo/Campbell River

South Island First Nations
Western Forest Products
International Forest Products
Zimmerman Forest Products Ltd.
GreenMax Resources, Shawn Flynn
Vancouver Island Forest Watch
Dave Ratson, RPF
Bryan Fraser, RPF

June 26

Vancouver

Forest Caucus of the BC Environmental Network
Lower Mainland First Nations

June 27

Vancouver

Lignum Ltd.
Western Canada Wilderness Committee
Public Service Employees for Environmental Ethics
BC Association of Professional Consulting Archaeologists
Association of Professional Engineers and Geoscientists
Weldwood of Canada
UBC/Arrow Research Team

June 28

Vancouver

Council of Forest Industries (COFI)
International Forest Products
Canadian Forest Products Ltd.

List of Briefs Submitted

In addition to the briefs submitted to Dr. Hoberg for each meeting, briefs were also received by e-mail, fax and post from other stakeholders to supplement the input provided in the meetings. A list of briefs received through the stakeholder process, organized alphabetically by stakeholder category, is provided below:

Academic Community

Barker, John, PhD, UBC, June 5th, 2002

Bendickson, Dennis, RPF, UBC, June 5th, 2002

Cashore, Benjamin, PhD, Yale School of Forestry and Environmental Studies, on behalf of ForestEthics, June 30th, 2002

Innes, John L., PhD, UBC, June 30, 2002

Lawson, Paul, RPF, UBC, May 14th, 2002

Lertzman, Ken, PhD, SFU, June 5th, 2002

Lyons, C. Kevin, PhD, UBC, June 5th, 2002

Sheppard, Stephan, PhD, UBC - 19 June 2002

Wood, Paul, PhD, UBC, June 5th, 2002

Weetman, Gordon, PhD, Professor Emeritus, UBC, June 5th, 2002

UBC Arrow IFPA working group comments - June 26, 2002

Agencies

Forest Practices Board, June 2002 (300k PDF)

Community Interests

BC Community Forestry Association, June 28th, 2002

Bulkley Valley Communities Coalition, June 12th, 2002

Fort Nelson and the Northern Rockies Region, Linda Wallace, June 30th, 2002

Prince George Chamber of Commerce, June 30, 2002

Sunshine Coast Forest Coalition, Kevin Davie, June 30th, 2002

Environmental Interests

Cortes Ecoforestry Society, June 29th, 2002

Ecocare Conservancy of Powell River, Maria Hunter, June 30th, 2002

Forest Caucus of the BCEN: Initial Discussion Notes, May 29 2002

Forest Caucus of the BCEN - June 26, 2002

ForestEthics, Greenpeace, NRDC, and Rainforest Action Network - June 19, 2002

Letter to Gordon Campbell, from US Environmental Groups, June 30, 2002

POLIS Project on Ecological Governance, University of Victoria, June 28, 2002

Queens Bay Residents Association, East Kootenay Environmental Society, and Kootenay Centre for Forestry Alternatives - June 30, 2002

Silva Forest Foundation, Herb Hammond - June 25, 2002

Society for Ecological Restoration, BC Chapter, June 28th, 2002

East Kootenay Environmental Society, MLA submission, May 4, 2002

Sierra Legal Defense Fund / ForestWatch, "Who's minding our forests?" - May 2002

Jim Cooperman -Shuswap Environmental Action Society, Salmon Arm BC

TBuck Suzuki Foundation and UFAWU joint submission, June 28th, 2002

Western Canada Wilderness Committee, June 27th, 2002

Public Service Employees for Environmental Ethics, June 27th, 2002

West Coast Environmental Law - June 25, 2002

David Suzuki Foundation, Panos Grames June 21, 2002

Dogwood Initiative (formerly Forest Futures) - June 20, 2002

Vancouver Island Forest Watch, June 25th, 2002

First Nations

Council of the Haida Nation, June 30th, 2002

Cowichan Tribes, June 28th, 2002

Ditidaht Huu-ay-aht Shared Territory Board, June 26, 2002

Eppa, Samahquam Nation, Mt. Currie, BC, June 28th, 2002

Little Shuswap Indian Band, Andreas Artz, June 20th ,2002

Hamatla Treaty Society, Rod Arnold, RPF, June 29th, 2002

Hul'qumi'num Treaty Group, Ladysmith, British Columbia, June 29, 2002

In-SHUCK-ch Council, Chief Allan Smith, June 30th, 2002

Ktunaxa Kinbasket Treaty Council, Cranbrook, BC, June 4, 2002

Ka:'yu:'k't'h/Che:k:tles7et'h' Nattion, June 28, 2002

Te'Mexw Treaty Association and the First Nations Treaty Alliance, Ray Travers, RPF, June 30th, 2002

Individual Submissions

Buss, Colin, RPF, June 30th, 2002

Chittick, John G. RPF

Dragovan, Nell M., June 7, 2002

Drosera Ecological Consulting, June 14, 2002

English, Denise, MF, RPF, June 5th, 2002

Flynn, Shawn, RPF, June 25, 2002

Fraser, Bryan, RPF, June 25th, 2002

Giles, Tim, Rob Hudson, Tom Millard, Jim Schwab, Pat Teti, Dave Wilford, and Rita Winkler (forest hydrologists and terrain specialists joint submission), June 29th, 2002

Glasman, Travis, RPF, Haida Gwaii, June 30th, 2002

Haley, Dave, RPF, June 29th, 2002

Hart, Sandy, P.Geo, June 28th, 2002

Holbrook, Paul, June 28, 2002

Heidrick, Bill, June 18, 2002

Jordan, Peter, PhD, PGeo, June 28th, 2002

Higman, Shelley, MSc, PEng/PGeo, Weyerhaeuser, June 29th, 2002

Hunter, Maria, June 30th, 2002

Morrison, Doug, RPF Nanaimo, BC, June 30th, 2002

Moore, R.D. (Dan), PhD PGeo, June 30, 2002

Parke, Bert, June 19, 2002

Peel, Kim, RPF, May 31, 2002

Quesnel, Harry, PhD, P.Ag., R.P.Bio., May 31, 2002

Ratson, Dave, RPF, D.R. Forestry Consultants, June 25th, 2002

Rollerson, Terry, P.Geo. - June 24, 2002

Scott, Mel, May 23rd, 2002

Soo Logging Ltd., June 16th, 2002

Terratech Consulting Ltd, June 21, 2002

Oliver Thomae, R.P.F, May 30th, 2002

Thomas, Judy, RPF, June 28th, 2002

Thornton, Donna, Mackenzie, B.C - June 2002

Unser, Chad, M.Sc., June 11, 2002

Wade, Bill, RPF, Prince George, BC

Watt, Francis, June 12, 2002

Weaver, Dave, RPF, June 28th, 2002

White, Jim, PAg, June 30th, 2002

Wilkinson, Graham, Tasmania, Australia, June 30th, 2002

Wilkinson, Merv, Ladysmith, B.C., June 28th, 2002

Wood, June, June 19, 2002

Wright, Peter, RPF, June 28th, 2002

Industry

Canadian Forest Products - June 19, 2002

Downie Timber Ltd, Revelstoke, BC, June 28th, 2002

Interfor, Rick Slaco, RPF, Comments from presentation, June 27th, 2002

Pope & Talbot

- Lyle LeClair, RPF, Silviculture Forester, June 28th, 2002
- Hakon Nielsen, RPF, Road Superintendent, June 28th, 2002
- Doug Noren, RPF, Development Forester, June 28th, 2002
- Randy Waterhous, Forest Planner, June 28th, 2002

Lignum Ltd. - June 26, 2002

Interfor, Bob Craven, RPF, User Perspective on the RBC, June 25th, 2002

Quirk, Tom, RPF, Woodlot Licensee, June 30th, 2002

Riverside Forest Products Ltd, Steve Viszlai, RPF, June 18th, 2002

Scott Paper Ltd, Dave Minhas, RPF, June 28th, 2002

Slocan Forest Products presentation, June 11, 2002

Slocan on the Fort St. John Forest Practices Code Pilot Project - June 11, 2002

Slocan LP OSB Corp, J.D. Beale, June 28th, 2002

Weldwood of Canada, Dave Patterson, RPF - June 27, 2002

Western Forest Products, Campbell River (Presentation) - June 25, 2002

Western Forest Products Ltd., Campbell River, BC, June 25th, 2002

West Fraser Mills Ltd., Pacific Inland Resources, Dave Ripmeester, RPF and Doug Witala, RPF, June 12, 2002

Weyerhaeuser Canada, June 5, 2002

Industry Associations

Cariboo Lumber Manufacturers' Association - June 10, 2002

Coast Forest and Lumber Association, June 28th, 2002

COFI, Discussion Paper Final Comments - June 28, 2002

COFI, "Toward a New Era for BC Forestry: Changing the Forest Practices Code and Other Key Forest Management Policies" - June 28, 2002

COFI, Response Overview Document - June 28, 2002

COFI, "First Approximation of an Alternative Approach to Changing The Forest Practices Code And Other Key Forest Management Policies to Better Achieve Government's Objectives" - June 28, 2002

Federation of British Columbia Woodlot Associations, June 10th, 2002

Interior Lumber Manufacturers Association - June 18, 2002

Truck Loggers Association, Rick Jeffrey - June 19, 2002

Truck Loggers Association, Rick Jeffrey - June 20, 2002

Northern Forest Products Association, June 11, 2002

North Island Woodlot Association, June 30, 2002

Resource Interests

Applied Ecological Stewardship Council of BC, G.J. McIntyre, May 28, 2002

BC Tapwater Alliance, June 30th, 2002

BC Trappers Association: Response to the Discussion Paper - June 15, 2002

BC Wildlife Federations, Doug Walker, June 30th, 2002

BC & Yukon Chamber of Mines, June 28th, 2002

Bulkley Valley Community Resources Board, Hans Smit, PGeo, June 5th, 2002

Cranbrook Recreation Coalition, Barbara O'Neill, June 28th, 2002

Council of Tourism Associations of BC, June 28th, 2002

East Kootenay Outdoor Club, June 28th, 2002

Forest Genetics Council of BC, June 30th, 2002

Granby Wilderness Society, June 28th, 2002

Guide Outfitters Association of BC, June 30th, 2002

Kootenay Christmas Tree Association, Eric Rasmussen - June 24, 2002

Canadian Mountain Holidays, "Commercial Tourism" - June 17, 2002

Hatzic Prairie, Durieu, McConnell Ratepayers Association, June 13, 2002

Northwest Natural Resources Network - June 12, 2002

Public Service Employees for Environmental Ethics, June 27th, 2002

Recreation Resources Limited, Jeremy Webb June 20, 2002

Vernon Seed Orchard Company, June 28th, 2002

West Kootenay Naturalist's Association, Ed Beynon, June 30th, 2002

Westcoast Vancouver Island Wildlife Advisory Committee, June 30th, 2002

Professional Associations

Association of Professional Biologists of BC, June 20, 2002; APBBC comments on draft 3 of Forester's Act

Association of BC Professional Foresters, June 7th, 2002

Association of Professional Engineers and Geoscientists of BC, June 27th, 2002

BC Association of Professional Consulting Achaeologists, May 30, 2002

Society of Consulting Foresters of British Columbia (CFBC) - June 20

Other

BC Government Employees Union, Cliff Stainsby, June 26th, 2002

Forestry Continuing Studies Network, June 28th, 2002

Appendix B

Website Statistical Summary

One of the elements of the results-based Forest Practices Code consultation process for the discussion paper was the creation of a Web site providing background information and inviting public comment on the creation of a results-based code. Designed and hosted by the UBC Faculty of Forestry, the Web site www.resultsbasedcode.ca was launched the same time the discussion paper was released on May 1, 2002.

The invitation for online public comment expired June 30, 2002 so Professor George Hoberg, Head of the Department of Forests Resources Management at UBC, could compile the submissions for a consultation process report to government by Aug. 1, 2002. Dr. Hoberg also met in person with forest-sector stakeholders in several communities and an MLA Committee held public hearings across the province as part of the consultation process.

The results-based code Web site had about 61,500 page views in May and about 26,500 page views in June for a total of 88,000 over the two months. The most frequently visited pages were:

PAGE	Page views in May	Page views in June	TOTAL PAGE VIEWS
Home or Index	17,972	6,828	**24,800**
Background Materials (news release, summary, companion documents, etc.)	9,258	2,654	**11,912**
Discussion Paper (HTML and PDF formats)	8,937	2,477	**11,414**
MLA Committee (public hearings schedule, news releases and biographies)	4,867	1,383	**6,250**
Stakeholder Process (how to arrange a meeting)	2,862	1,143	**4,005**

The www.resultsbasedcode.ca Web site offered the discussion paper in two different formats. The HTML format, allowing readers to link directly to select sections, was preferred with 6,185 hits to the table of contents page. The version in PDF format had 3,230 visitors make their way to the page for downloading the document in its entirety.

A popular feature of the Web site was a topic-specific discussion forum to provide debate and post suggestions for the creation of a results-based Forest Practices Code. The discussion forum had 278 posts and 175 users in total.

In addition to the discussion forum posts, 134 written submissions were received. Of those written submissions, 112 were stakeholder briefs and 22 were presentations made to the MLA Committee.

Consultation Reports

Appendix C

Compendium of Technical Input on the Results-Based Management Regimes

It seemed appropriate, given the government will be reviewing this report as input into the development of the results and rules incorporated into a results-based code, that we organize specific input into the value themes introduced in the paper.

Each value has an associated table which outlines the commentary received on each Goal statement, Result and Rule introduced in the discussion paper. Some statements have been paraphrased from the text of the submission for the sake of brevity, with a reference provided such that ministry working groups can reference each brief for further information if need be.

To view a compendium of the comments received on each of the values, refer to the page outlined below:

6.2.1 Landscape Level Biodiversity
6.2.2 Wildlife Trees
6.2.3 Coarse Woody Debris
6.2.4 Management of Visual Quality
6.2.5 Forest Health
6.2.6 Roads, Stream Crossings and Access Management
6.2.7 Silviculture
6.2.8 Gene Resources
6.2.9 Soil Conservation
6.2.10 Terrain Hazard Management
6.2.11 Community Watersheds and Watersheds with Significant Downstream Fisheries Values
6.2.12 Riparian Management
6.2.13 Ungulate Winter Range
6.2.14 Identified Wildlife
6.2.15 Resource Features
6.2.16 Cultural Heritage Resources
6.2.17 Lakeshore Management

6.2.1 Landscape Level Biodiversity (general, incomplete - gf)

Results Based Code	Summary of Submission	Stakeholder
A. Retention of Old Forest		
Goal Statement Forest development will conserve the representation of old forests consistent with land use objectives and policy that balances biodiversity conservation with social and economic considerations.	COFI says leading scientists in conservation biology have found that existing guidance on implementing biodiversity in the Landscape Unit Planning Guide is wrong and will lead to a negative impact on biodiversity sustainability. COFI is also critical of the new code's prescriptive elements, and says these same scientists "have consistently stated that a prescriptive process that requires a result of the same thing everywhere is a significant mistake in managing biodiversity values."[1] Given its serious concern with the results-based code's treatment of biodiversity and other values, COFI recommends rejecting the results-based code in favor of an alternative approach. Under that approach, the government's proposed land use objectives, rules, and results for biodiversity would not apply. Instead, there would be timber targets that would guide land use and operational planning, and operational plans would only need to be consistent with existing and new regional land use plans and land and resource management plans. The only operational plan submitted for district manager approval would be a Forest Stewardship Plan, and this plan would address all landscape and stand-level resource values, including biodiversity, and would be results-oriented.[2]	COFI, Comments on Discussion Paper, p. 33-34. COFI, Changing the Forest Practices Code and other Key Forest Management Policies, p. 25-26.
	Many respondents support the following recommendation of the Forest Caucus of the BCEN: "Legally implemented landscape level	Forest Caucus of BCEN,

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[1] COFI, Comments on Discussion Paper, p. 33-34.

[2] COFI, Changing the Forest Practices Code and other Key Forest Management Policies, p. 25-26.

	objectives for biodiversity (for all values addressed in the Biodiversity Guidebook), which are scientifically defensible and unconstrained by timber supply impact caps or timber targets, must be in place before bringing into effect a results-based Code, and must not be subject to exemptions. At a minimum, legally binding interim biodiversity objectives must be in place."[3]	p. 1.
	WCEL further recommends: "interim objectives should reflect targets, etc. based on the high biodiversity emphasis option in the Biodiversity Guidebook, and that specific results and rules that require compliance with these be implemented. Not only will this facilitate FSC certification (the only credible certification scheme from the perspective of the environmental sector), but more fully integrate an ecosystem-based approach to balanced use."[4]	WCEL submission, p. 44-45.
Cross-reference: See RDP Approval Test #2 under Section 5.3. Prior to issuing an RDP, the District Manager must be satisfied that the RDP retains sufficient old forest to meet land use objectives. ▪ Sufficient old forest cover must remain in a specified landscape zone (BEC variant within a landscape unit) to meet the requirements as laid out by land use objectives. ▪ In the absence of objectives, interim objectives in the legislation will specify	COFI says: "The requirements for landscape level biodiversity are worse than the existing Code". COFI comments that new elements are being added and that the objectives for existing elements are not known but are potentially worse. It believes that managing to a result within a landscape unit will be complex and will severely reduce flexibility. COFI is also concerned that the evidentiary burden at the RDP level is unknown and could be very high. COFI says "there is no clarity on how evaluations [of consistency between the RDP and land use objectives] will be done, who does them, and who pays for them."[5]	COFI, Comments on Discussion Paper, p. 33-44.
	WCEL further comments that "the RDP is not required to provide sufficient detail to determine, for the most part, whether proposed logging operations are consistent with biodiversity objectives.	WCEL submission, p. 40.

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[3] Forest Caucus of BCEN, p. 1.

[4] WCEL submission, p. 44-45.

[5] COFI, Comments on Discussion Paper, p. 33-44.

the amount of old forest representation that must remain. The interim objectives will address situations where a particular landscape zone does not contain sufficient old forest to meet the objective.	Moreover, the word 'consistent', in the context of the Code, means merely not in "material conflict", further watering down the likelihood that biodiversity would be effectively protected under the proposed Code."[6]	
Exemption: The District Manager will be able to exempt an RDP from having to meet interim old forest objectives in the following circumstances: • when necessary to address a forest health factor; • when necessary for road development; • where no reasonable and cost-effective alternative exists; or, • when necessary to achieve timber supply objectives as per existing code impact policy.	West Coast Environmental Law strongly opposes timber supply constraints on the protection of biodiversity, and notes that "balancing" of biodiversity conservation with economic and social considerations occurred before the original Code and Biodiversity Guidebook were released, and that subsequent government policies further limited the timber supply impacts of implementing landscape level planning. WCEL comments that these constraints are extreme and are acknowledged by government scientists to present significant risks to biodiversity.[7]	WCEL submission, p. 39.
	Almost all respondents, other than the forest industry, commented that the exemptions to meeting interim old growth objectives are so broad that they could apply to virtually any RDP. In the Kootenays, environmental interests state: "we have a serious concern about exemptions from meeting old growth or other biodiversity objectives. The list of exemptions effectively makes standards for old growth so susceptible to economic considerations as to make them meaningless."[8]	Queens Bay Residents, East Kootenay Environmental Society, Kootenay Centre for Forestry Alternatives, submission, p. 3.
B. Representation of Other Seral Stages		
	Some respondents are concerned that there are no rules or results for	WCEL submission, p.

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[6] WCEL submission, p. 40.

[7] WCEL submission, p. 39.

[8] Queens Bay Residents, East Kootenay Environmental Society, Kootenay Centre for Forestry Alternatives, submission, p. 3.

Goal Statement Forest harvesting will conserve other seral representation consistent with land use objectives and policy that balances biodiversity conservation with social and economic considerations. There will be no management of other seral stages unless specified by land use objectives	other seral stages in the discussion paper, and that there will be no interim objectives for other seral stages. WCEL says: "There appears to be a low probability that maximum thresholds for early seral and minimums for mature will be implemented before further biodiversity loss occurs."[9]	41.
	Goal statements for retention of old-growth and seral stage distribution are open to very wide interpretation depending on how the balance is tipped in favour of "biodiversity conservation" or "social and economic considerations". Without a site-specific map in the RDP, the DM will not be properly able to assess Test #2 for these attributes. As the DM is allowed to make exemptions under circumstances that amount to "for any reason", there is no substance to either of these proposed requirements.	Northwest Natural Resources Network, p. 19
Cross-reference: See RDP Approval Test #2 under Section 5.3. Prior to issuing an RDP, the District Manager must be satisfied that the RDP retains sufficient other seral representation to meet land use objectives. Test considerations for other seral objectives will be similar to those for old forest and there will be no interim objectives. Objectives, and their application, will be consistent with current policy		
C. Landscape Connectivity		
Goal statement Where objectives for landscape connectivity have been legally established, features contributing to landscape connectivity will be	As well, some respondents are concerned that landscape connectivity will only be conserved where objectives for landscape connectivity have been legally established. The Council of the Haida Nation says: "This provision is completely inadequate because connectivity must	Council of the Haida Nation, p. 10.

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[9] WCEL submission, p. 41.

conserved. The objectives and management regimes for a number of other values will contribute substantively to conserving landscape connectivity.	be maintained in a forest landscape at multiple spatial scales in order to meet the needs of a range of species."[10]	
	Landscape connectivity: The provisions in Section 6.2.1.C are inadequate. According to the goal statement, connectivity will only be conserved where objectives have been legally established. The default in the absence of legally-established objectives is not specified. The implication is that connectivity needs will be ignored in all landscape units where objectives have not yet been established, in essence, the vast majority of British Columbia. A provision for landscape connectivity in areas where landscape unit plans are not presently in place must be included. The second sentence has no place in a goal statement, and once again the RDP requirements are not sufficiently detailed to allow this attribute to be properly addressed.	Northwest Natural Resources Network, p. 19
Cross-reference: See RDP Approval Test #2 under Section 5.3. Prior to issuing an RDP, the District Manager must be satisfied that the RDP demonstrates consistency with legally established landscape connectivity objectives		
D. Temporal and Spatial Distribution of Cut-blocks		
Goal Statement: Provide the opportunity for forest harvesting that will emulate the temporal and spatial distribution of openings created by natural disturbance, and will prevent forest fragmentation consistent with objectives that balance biodiversity conservation with social and economic considerations	Temporal and spatial distribution of cutblocks: On the coast and in the wetter interior where most disturbances are very small and disturbance return intervals are very long (> > 200 years), it will be impossible to "emulate the temporal and spatial distribution of openings created by natural disturbance" unless cutblocks are limited to a few ha in size, partial cutting is used everywhere and overall extraction rates are very low. From a silvicultural and timber supply point of view, neither of these approaches is realistic or desirable. Even in the dry interior where natural disturbances are larger and more frequent, it will be impossible for management "emulate" natural	Northwest Natural Resources Network, p. 19

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[10] Council of the Haida Nation, p. 10.

	disturbance. Substitute the word "reflect" or an appropriate synonym.	
	Should explicitly note the temporal aspects of connectivity (connections can be broken and reform in the same or different places) and the importance of lack of connectivity (or fragmentation) in some situations (e.g. Kermode gene expression, evolutionary functions).	WFP, Summary of Operational Comments, p. 11
Cross reference: See RDP Approval Test #2 under Section 5.3. 1. Where objectives have been legally established, the District Manager must be satisfied that forest development units are designed to result in cut-blocks that contribute to achievement of patch size objectives. 2. Where objectives have not been established, the District Manager must be satisfied that forest development units will result in cut-blocks that do not exceed: ▪ 40 ha for the Vancouver, Kamloops and Nelson Forest Regions ▪ 60 ha for the Prince George, Prince Rupert and Cariboo Forest Regions 3. Where a licensee has developed a landscape design for the area of an RDP that is demonstrated to achieve the intent of the goal statement, the District Manager must be satisfied that forest harvest units are consistent with the objectives of that design. ***4.*** In all cases, the District Manager must be	The discussion paper indicates that "the district manager must be satisfied that cut-blocks within a proposed RDP will achieve objectives for other resource values." The Council of Haida Nations says there are no criteria and indicators defined in the discussion paper that would allow the district manager to determine whether cut blocks protect non-timber forest values.[11]	Council of the Haida Nation, p. 10.

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[11] Council of the Haida Nation, p. 10.

satisfied that cut-blocks within a proposed RDP will achieve objectives for other resource values.		
Test limitations and considerations: 1. A cut-block may not be harvested adjacent to an opening that has not achieved green-up standards unless the combined opening size is less than prescribed limits. 2. The green-up standard will be 3 m unless otherwise specified in objectives established by MSRM. **3.** A licensee preparing an RDP may include a table to support a determination that describes opening sizes to be achieved within a forest harvest unit or notes the exemption criteria that apply within the unit.		
Exemption: 1. The District Manager may exempt a forest harvest unit within an RDP from having to meet prescribed cut-block size limits if harvesting is to be conducted to sanitize an area of infested timber or to salvage timber damaged by fire, wind, insects or similar factors, as long as: • the cut-block incorporates the structural characteristics of natural disturbance, or • the silviculture system is other than clearcut or seed tree and will retain 40% or more of pre-harvest basal		

area well distributed across the opening. **2.** The District Manager may increase the green-up standard if it is believed that a different limit is necessary for hydrologic reasons, to manage wildlife values, or to manage recreation or scenic values or for other similar reasons.		
General Comments	The goal statement for retention of old forest requires consistency with policy that balances biodiversity conservation with social and economic considerations. Many non-forest industry respondents strongly disagree with this approach. ForestEthics says: "Instead of saying, as we might expect a results based code to say, "industry can do whatever it wants provided it meets the following old growth objectives", this section appears to be saying, "if industry can't meet old growth objectives because of cut objectives, that is fine". It seems inaccurate to call this a results based approach to old growth preservation."[12] Both environmental and industry respondents find fault with existing guidance and timber supply impacts policy governing implementation of biodiversity under the Code. Given that existing biodiversity guidance and policy are intended to guide development of land use zones and objectives for biodiversity under the results-based code, it may be prudent for government to re-evaluate existing biodiversity guidance and timber supply impact policies. This would ensure land use zones and objectives for biodiversity are based on current scientific analysis and socio-economic considerations.	Ben Cashore, ForestEthics, p. 17.
	Many of the problems related to old-growth, seral distribution, connectivity, and cutblock size and distribution noted above would be more easily dealt with through submission of a biodiversity plan in conjunction with a "5 or 10	Northwest Natural Resources Network, p. 19

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[12] Ben Cashore, ForestEthics, p. 17.

	year plan" for an area-based tenure. The granting of area-based tenures of sufficient size and longevity to ensure long term co-ordinated planning by an operator is the best way to avoid a the piecemeal approach to biodiversity planning that is promoted by the RDP proposal. An expanded woodlot program as well as the Timber Sales Program would fit nicely into this scheme. Lichens are ideal bio-indicators and should be used to monitor the efficacy of the coarse filter approach to biodiversity conservation outlined in the RBC.	

6.2.2 Wildlife Trees

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *All harvest areas will retain ecologically suitable wildlife trees in quantity, quality and distribution typical of naturally occurring stand structure.*	Retention should not be required on every cut-block, but be tracked and measured on a landscape level. There should be no WTP's required for small scale salvage openings (< 5ha)	West Fraser Mills Ltd, Dave Ripmeester, RPF, and Doug Witala, RPF, June 12, 2002
	would like to see denning potential as a criterion in consideration of "ecologically suitable" wildlife trees. recent research in interior BC has demonstrated a very high reliance on large cottonwood trees for maternal denning by fishers.	BC Trappers Association, June 15, 2002, p. 2
	statement is vague and unworkable. this is only possible if no harvesting occurs. "typical of" would be changed to "reflective of". Many site specific factors will determine potential or suitable wildlife tree density and distribution. Although general targets may be possible in regulation, even generalizations by sub-zone or variant ignore the variability in ecosystem distribution from one watershed to another. This issue is made even more complex by the need to comply to WCB regulations regarding danger trees. Depending on stand and soil characteristics (related to blowdown), patches may be necessary in some areas while single trees are appropriate in others.	Northwest Natural Resources Network, June 12, 2002
	it is not clear what "ecologically suitable" is, nor is the "quantity, quality and distribution typical of natural occurring stand structure" known or inventoried	COFI, Final Comments paper, June 28, 2002, p. 44
	poor definition in terms of measurability and second growth has none a hard-line interpretation of the goal and result statements as written would pretty much preclude most harvesting. Natural patterns and quality cannot be maintained over the whole landscape. Instead the goal and result should be related to survival of species endemic to the local landscape.	WFP, June 25, 2002, p.11

Result: *Wildlife trees will be retained after harvest that consist of ecological suitable trees in the quantity described by regulation and in a distribution that reflects natural patterns.*	the result, unlike the goal statement, makes no reference to the "quality" of the tree. While "quality" involves a somewhat subjective evaluation, it could easily be included in the result to deal with situations where clearly inappropriate trees are left. the details of the quantity of wildlife trees is not provided (they will be included in regulation later), making it impossible to evaluate whether the level of wildlife tree retention will be appropriate. the result specifies that the wildlife trees should be left in a distribution "that reflects natural patterns." This is one of the many examples of where the licensee should be required to research, and make available, on request, documentation as to what the natural patterns were prior to logging.	West Coast Environmental Law, June 2002, p. 34
	without the SP I'm still not sure how site specifics will be accounted for the ecologically suitable trees don't appear to be significant. "Quantity described by regulation" and "distribution that reflects natural patterns" are both subject to the regulations and/or will require a paper trail backup by a "qualified person" utilizing a recognized standard of practice.	WFP, June 25, 2002, p. 11
Rule 1 *Wildlife tree retention levels, as specified by regulation or set as a land use objective by government, must be applied as an average for cut-blocks within a landscape unit by sub-zone with some retention associated with every cut-block.*	It is practical to associate some wildlife tree retention with *most* cut blocks, but it is not practical to associate WT retention with *every* cutblock.	Pope & Talbot, Doug Noren, RPF, June 28, 2002
	at least 3 reasons why we may not leave wildlife trees on a cutblock: ▪ the cutblock is < 5h as required in critical deer habitat areas ▪ the most effective site preparation technique is broadcast burning; and ▪ the most effective harvest method is downhill yarding in order to minimize road on the landscape to not carry out effective site preparation means additional cost for alternative treatments and compromised results. Where is the cost/benefit analysis of such a legislated result?	Wes Bieber, RPF, June 15, 2002

	Quantity/retention levels should appropriately be described in land use objectives and it must be clear that these objectives take precedent over regulation. It is positive that WT targets will be set "...as an average for cut-blocks within a landscape unit..." Important that some blocks can have 1% retention and others 20% providing the desired average is met over the unit.	WFP, Summary of Operational Comments, June 25, 2002, p. 11
	There is no legal definition of "ecologically suitable" might be. Without the regulation itself, it is difficult to assess fully the impact of this result statement It is unclear whether regulation will take precedent over a land-use objective or vice-versa. The process for defining land use objective, what the criteria will be and how forest industry interest and priorities will be take into account is critical to this result. It is even more unclear what is meant by "applied as an average for cutblocks within a LU by subzone with some retention associated with ever cutblock". this will be difficult to monitor. there is often more than one licensee in an LU. Many cutblocks are very small and already fully surrounded by standing timber. There is also no apparent recognition of partial harvest cutblocks.	COFI, Comments paper, June 28, 2002, p. 44
	Wildlife tree retention post harvest is worthwhile, but without knowing the quantity described by legislation it is difficult to comment on the achievability of this result.	BC Community Forestry Assoc, June 28, 2002
	There is no reference to indicate that First Nations can establish regulations or land use objectives. This appears to undermine First Nations abilities to establish management requirements for the land base. This is inadequate.	Ditidaht Huu-ay-aat Shared Territory Board, June 25, 2002
	there is a risk of this continuing to be very prescriptive. WTP's required on each block irrespective of size does not make any ecological sense and likely impacts timber supply. Rather than stating that wildlife trees must be part of an SFM plan and be maintained in an appropriate spatial and temporal distribution at the landscape level, this should be handled in "best practices"	Slocan Forest Products, June 11, 2002, p. 20

Rule 2 *The retention objective must be met by the end the term of the RDP.*	It will be extremely difficult, if not impossible, to achieve and monitor this rule given that no amendments will mean frequently replaces RDP's. It is likely that RDP terms will vary from the original as they are replaced. There is no accommodation for multiple licensees in a LU.	COFI, Comments paper, June 28, 2002, p. 45
	rules associated with the WTP results are contradictory - Rule 1 says there must be some associated with every cutblock, and rule 2 says the objective must be met by the end of the RDP term.	Pope & Talbot, Randy Waterhous, June 28, 2002
Rule 3 *No person can harvest designated wildlife trees without authorization and designation of a replacement area.*	This rule is redundant. If licensees are managing to a result over a period of time, there is no need for process requirements like this. As cutblocks are not defined in a RDP, there cannot be a definition of specific wildlife trees. The term "designated" is new in this rule and who designates and who will monitor this designation is not defined. It may have to take place after the approval of the RDP. It is not clear who would provide the "authorization" and what kind of application process would be required to achieve this authorization. It is also not clear if the results and rules in this section are focused on specific wildlife trees or wildlife tree patches.	COFI, Comments paper, June 28, 2002, p. 45
Exemption with condition: *Designated wildlife trees can be harvested to address a forest health factor (e.g. windthrow damage, bark beetle infestation) if:* ▪ *approved by the District Manager; and* ▪ *replacement wildlife trees with similar structure and amount are located as close as practical to the harvested trees.*	Why should approval be required for this? If areas are sufficiently replaced and kept on file by the licensee in the case of an audit, this would be a more reasonable approach.	Weyerhaeuser, North Island Group, May 29, 2002
	the concept of providing for ad hoc exemptions or variances from fixed results or rules consumes more resources and is less flexible than allowing for site specific proposals for results to be made at the application stage. It is not clear what kind of application process would be required to achieve this approval. It may not be possible to replace wildlife trees that have "similar" structure and amount. This is more restrictive than the existing Code	COFI, Comments paper, June 28, 2002, p. 46

	Designated wildlife trees should NOT be exempted and allowed for harvest because of damage to the trees, particularly if the damage is windthrow. The intent of wildlife trees is to provide habitat over a long term period, and includes over time becoming: snags, downed trees and coarse woody debris. Habitat is provided at all stages of damage and deterioration of the trees. To harvest wildlife trees because they have been damaged would remove the long-term benefit of these tress as downed and decaying coarse woody debris. I definitely disagree with the exemption.	Fred Philpot, RPF, May 14, 2002
Information requirement: *Refer to the information requirements for the silviculture regime (section 6.2.7).*	This prescriptive requirement does not make much sense as it is a generalize annual requirement is not consistent with operational realities.	COFI, Comments paper, June 28, 2002, p. 46
General Comments	Presumably some cutblocks will be harvested every year of the RDP so the objective must be met with every cutblock. This could also lead someone to believe that the SDM is going to want to see the location and size of WTP's in relation to the cutblocks as part of the evidentiary burden to evaluate the tests. An RDP is sounding more like the current FDP all the time.	Pope & Talbot, Randy Waterhous, June 28, 2002
	Is the goal of retaining wildlife trees according to typical naturally occurring stands consistent with the rules, which acknowledge that retention levels will be set as a land use objective (presumably below naturally occurring levels in some instances to meet economic requirements?) Or perhaps the goals should be expressed in terms of wildlife trees in harvest areas being retained at rates that will contribute towards wildlife conservation at the landscape level.	Graham Wilkinson, Forest Practices Board Tasmania, June 28, 2002
	it should say somewhere in the Code that safety precedes everything else	WFP, June 25, 2002, p. 11
	more restrictive that the current Code as they transfer into law what is now only guidance in guidebooks. These results and rules will add costs and reduce timber supply. This approach is not consistent with the objectives of reducing industry costs and providing industry "freedom to manage" in the	COFI Final Comments paper, June 28, 2002, p. 44

	deliver of defined results.	
	A comprehensive plan for wildlife tree retention is another plan at a time when efforts are supposed to be towards reducing unnecessary workloads and costs. Wildlife tree retention requirements should be eliminated for woodlots. A woodlot is already a wildlife tree retention area by virtue of having to maintain a profile and age class distribution that meets sustainability objectives.	Federation of BC Woodlot Associations, June 2002, p. 9

6.2.3 Coarse Woody Debris

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: All harvested sites will retain ecologically appropriate coarse woody debris in a quantity, quality (size, species, decay class) and distribution typical of natural forest conditions, considering other resource management goal statements.	The management of CWD is not fully understood. There is no definition of "ecologically appropriate", nor is there agreement amongst experts in conservation biology about the appropriate quantity, quality, distribution nor temporal requirements of CWD.	COFI, Comments paper, June 28, 2002, p. 47
	This value should not apply to woodlot licenses. Harvested areas are small, plus the non-harvested areas of a woodlot licence fulfill any reasonable requirement for coarse woody debris retention. Ongoing management will ensure a continuous supply of CWD. Waste billing is an issue in some cases.	Federation of BC Woodlot Associations, June 10, 2002, p. 7
	is the research adequate to determine this distribution by stand and ecosystem type? would preclude utilization of dead and down wood (of huge economic importance in cedar stands to both the primary forest industry and minor products operators.) recommend wording change to "Harvested sites will, on average, retain CWD in a quantity, quality (size, species, decay class), and distribution necessary for ecological functioning and survival of dependent organisms." CWD should not necessarily be dispersed uniformly and clumps (piles) may have ecological benefits "Don't do the same thing everywhere" (Bunnell quote) do we have to yard big pieces back out onto the setting if someone deems there is not enough? is this auditable? will piling and burning debris at roadside not be a standard practice on the Coast anymore? "decay class" is a new factor and a bit of an unknown – how does one manage decay classes? how about lack of decay classes in 2nd growth?	WFP, June 25, 2002, p. 12
	There is a risk of this continuing to be very prescriptive. Government should	Slocan Forest Products,

	clarify whether that is its intent, and whether the "full rotation" clause is realistic. Forcing all Strategic, management unit objectives onto each cutblock is not necessary in a science-based SFM framework. CWD is an element that fits within the landscape level strategies of a SFM Plan. It should be dealt with there, and in best practices, as opposed to the current proposal which is limiting and possibly unrealistic. Link indicator species to their required habitat elements and the habitat elements to representative (BEC) ecological units. Setting and then monitoring thresholds at each level will allow managers to see if they are truly sustainable.	June 11, 2002, p. 20
Result: Coarse woody debris will be left dispersed on the site after harvest. This retention will include large pieces that can last the full rotation. Coarse woody debris retention will be balanced with other resource management objectives and results.	The result is too vague. In some stands there will never be large pieces that will last the full rotation. Specifications are needed on volume/ha, sizes, decay class and suitable distribution in order for this result to be achievable.	BC Community Forest Association, June 28,2002, p.4
	focus on rules, rather than on protecting the forest ecosystem, wildlife habitat, and soil preservation. also, no identified performance verifiers that must be met. Recent research reveals CWD plays a vital role in forest ecosystem function. Guidebook recommends 50% of the natural amount of downed wood be left on site, rules developed after extensive research on the effects of downed wood on ecosystem function and soil productivity. identify clearly in the results section what natural ecosystem functions are promoted by CWD, and the indicators that must be achieved. RBC wouldn't tell how to leave woody debris, but would tell them to do so in a way that achieves intended results in improving forest ecosystem function. out of place to be balancing result with economic or social objectives, but better to make the balance decision up front rather than "hidden" in the mind of the person assessing whether the objectives have been met.	Benjamin Cashore on behalf of Forest Ethics, June 28, 2002, p. 15
	maintain CWD for one rotation, not difficult in Cw areas, what about Hw areas? means leaving large billable volume on the ground – will there be	WFP, Summary of Operational Comments,

	residue exemptions?	June 25, 2002, p. 12
	statements weak and inadequate. CWD results will be heavily dependent on site specific factors. In the absence of specific stated objectives for any given area, compliance and enforcement will be next to impossible. best dealt with in an approved biodiversity plan for a specific area (points again to the need for area-based tenures)	Northwest Natural Resources Network, June 12, 2002, p. 19
	how will this be measured? is this a practical result in the case of roadside processing/piling? is piling a better approach in maintaining plantability of a site? remove requirement for dispersal to allow licensee flexibility to achieve other objectives. retaining large pieces may not be possible in 2nd growth stands – recommend remove statement	Weyerhaeuser, North Island Group, May 29, 2002
	vague and unenforceable result. although requirement to leave large woody debris for full rotation is positive, how much woody debris is to be left? what is an appropriate "balance" between retention and other objectives and results – licensee will be doing the balancing, not government... consider similar approach to wildlife tree retention. develop a matrix in regulation to provide further detail on quantity (volume and/or large debris) and quality (size, species and decay class) of debris to be left. base numbers on the range of natural variability in such stand structures at the landscape and stand levels. alternative is to require 100% retention of naturally occurring CWD – necessary to provide assessment of natural forest conditions before logging	West Coast Environmental Law, June 2002, p. 35
	want CWD that doesn't rot for at leas a hundred years – some (many) ecosystems do not support enough large trees to last a rotation. current utilization rules might make these objectives difficult, impossible or costly (waste billing) to achieve. how would this be subject to monitoring and enforcement? If it's impossible to monitor, it should not be in the rules. Scrap it entirely	Pope & Talbot, Randy Waterhous, June 28, 2002
	leaving suitable CWD is entirely practical on *most* cut blocks, but it is not	Pope & Talbot, Doug

	practical to insist on it for every block. for instance, what about the blocks that require broadcast burning?	Noren, RPF, June 28, 2002
	no threshold or other basis for measuring the result as provided. with the current wording, leaving two large logs at either end of a cutblock would be sufficient, regardless of which forest type or disturbance regime it is located in . the invocation of "balance" is no more informative	Sierra Club of BC, Lisa Matthaus, June 20, 2002, p. 3
	how do you determine what CWD can "last a full rotation"? when will this be measured for a successful result?	West Fraser, Ripmeester/Witala, June 12, 2002
	unrealistic result. CWD results should not be a "one size fits all" as requirements vary greatly. Current utilization requirements may make achievement of this result impossible. Also the result conflicts with forest health results and rules. The law that requires CWD to be left on site that can last a full rotation is not biologically possible to achieve on some forest sites in the province. There is no available evidence that this requirement can be met. There is no mechanism for CWD results to incorporate social and economic considerations as there is no definition of these values in the RBC	COFI, Comments paper, June 28, 2002, p. 47
General Comments	utilization standards will need to be modified to accommodate CWD objectives. how do we ensure the objectives are met on the ground. need quantity, quality (size, species, decay class) and distribution. to be enforceable, objectives will need to be fairly specific.	WFP, Summary of Operational Comments, June 25, 2002, p. 12

6.2.4 Management of Visual Quality

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *Forest development activities will achieve visual quality objectives within scenic areas.*	Scenic areas to be mapped by MSRM, and objectives to be set by MSRM as part of strategic process. The DM will establish them consistent with land use objectives. Licensee delivers results consistent with VQO, No economic impact aspect included. It should at least be a policy guidance for MSRM to look at tradeoffs.	WFP, Summary of Operational Comments, June 25, 2002
	Defined Scenic Areas, as we presently know them, are insufficient. many Tourism operators without recognition of their visual product. Tourism industry must have a role in the process, actively involved with their concerns addressed – an opportunity to capitalize on their expertise with sound solutions looking toward innovative and creative harvesting practices which meet both users needs	Hank Krawczyk, Canadian Mountain Holidays, June 2002
	Ongoing confusion on this value as the scenic areas are to be designated by MSRM and VQO's are to be set by the local DM. Need an inclusive process to develop these objectives and areas with clear social and economic goals that take into account forestry priorities.	COFI, Comments paper, June 28, 2002, p. 47
	Given the value and need for CWD, important to specify visual objectives in terms of distance viewing (cutblock shape, size, location). Up close, cutblocks that look "messy" will provide the maximum returns in terms of biodiversity retention and management	BC Trappers Association, June 15, 2002
Result: *Forest harvesting and road construction will achieve VQOs or interim objectives established for polygons within scenic areas established by government.*	Result is based entirely on objective for scenic areas. the proposed approach appears to insert a further step of government "establishment" of scenic areas. If areas that currently have policy-based visual quality objectives are not established as scenic areas, the proposed Code may reduce standards for VQ management. Visual management is a field where proactive assessment is a necessary, valuable and commonly used tool. licensees will likely have to carry out the assessments to meet the desired result in any event. do not... eliminate all	West Coast Environmental Law, June, 2002, p. 35

	planning and assessment requirements from the Code. requiring planning be done to specified standards is an appropriate result in itself There are no rules proposed for scenic values. measurable and enforceable standards from the Visual Impact Assessment Guidebook should be incorporated into the rules, providing a basis for ensuring that the result is met. Necessary to ensure all areas with important visual quality values be designated as scenic areas. include rules based on VIA guidebook. also include a general rule that a licensee be required, prior to operations, to "have a qualified professional conduct an assessment of the impact of its operations on visual quality and minimize such impact, or, for scenic areas, to ensure compliance with VQO's or interim objectives set for that scenic areas," and to require public participation in the process	
	Selection and shelterwood silviculture systems with multispan cable yard techniques are not low cost treatments. After lightning strikes and gusting winds resulted in the loss of that hard work, where money spent to achieve an objective that in consideration of the natural disturbance patterns cannot be maintained on the landscape. Douglas-fir population increases in the area further impacted on this scenic area.	Wes Bieber, RPF, June 15, 2002
	Ongoing MSRM objective/MoF DM setting VQO's with not coordination mechanism in place. Not clear how VQO's are being interpreted – strictly on numbers or on subjective aspects. Not clear what is meant by "polygons". No exemption for forest health, or fire killed timber. This will conflict with the results and rules for forest health and fire protection.	COFI, Comments paper, June 28, 2002, p. 48
General Comments	Will there be an exemption for forest health?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
	Government responsible for determining the scenic areas, it would be worthwhile to have local involvement in this decision. Identifying what locals consider scenic areas prior to harvest will reduce potential conflicts	BC Community Forest Association, June 28,

	between licensees and community members. results too vague – without knowledge of what is required to achieve VQO's it is difficult to provide meaningful comments	2002
	Will MSRM recommend VQO's, which will be established by a DM, or will MSRM prescribe a theme or desired landscape such as "attractive, natural, wild, rural appearing and a nDM will interpret and establish an appropriate VQO? How will MSRM determine levels of landscape quality or land use objective? A broad based strategic planning process is a good approach… unless a formal assessment tool (i.e. VLI) is used, applying formal VQO's based on anything other than a formal system is a questionable practice. Landscape resources are qualitative. Professional foresters and engineers are not good with qualitative… Key concern has been the discretion of DM's whether to *make known* scenic areas, and hence require, management of landscape resources. Has resulted in inadequate management of landscape quality where we need it most (i.e. remote coastal areas, or in areas off main travel corridors which have exceptional qualities) resulting in the loss of working forest areas – and further loss where management if landscape quality is based on viewer numbers, rather than inherent qualities. MSRM… deliver a result that addresses this issue,… in the interest of the working forest. Landscapes current managed as a constraint, not a resource, based on minimizing impacts on timber supply. Need long-term planning, designing landscape appearance over a full rotation. Current landscape management and visual impact assessments, on a block-by-block basis, even with a higher level plan in place that sets the VQO – does not come close to what could be achieved with landscape management. VQO's or any landscape objective not easily enforceable because of the qualitative nature of landscape alterations and the many ways in which a desirable impact can be achieved.	Jeremy Webb, Recreation Resources Ltd, June 20, 2002

	Retain and apply existing approaches outlined in VIA guidebook, with emphasis on landscape design Do not set VQO objectives as they limit landscape management practice and unnecessarily constrain timber volumes. Use MoF and licensee landscape management tools and vital practical experience, furthered through trials, training, conferences and sharing of expertise Broader application of landscape management, based more on inherent qualities of landscape than on use, brought about and supported by MSRM strategic planning process	
	There is a need for possible exemptions as it might not be possible to salvage damaged timber (windthrow, pest, disease,...) while meeting VQO's. OPR S.37(4) used to deal with that.	WFP, Summary of Operational Comments, June 25, 2002
	This is simply a regurgitation of the old OPR prescriptive rules, with no more clarity, no costs savings and no limits to impacts on timber supply. Again it implies that the RDP must specify cutblock locations and prescriptions as part of the evidentiary burden for SDM to evaluate the tests.	Pope & Talbot, Randy Waterhous, June 28, 2002

6.2.5 Forest Health

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *Forest health management will protect provincial forest and range resources and will maintain productivity by minimizing losses and mitigating future risks to provincial forest and range resources from forest health factors and invasive plants.*	The statement does not distinguish between endemic and epidemic forest health situations or identify the responsibilities of government and industry. It does not state that government will take responsibility for epidemic attacks and provide industry the ability to remove barriers to rapid response.	COFI, Comments paper, June 28, 2002, p. 48
	Lots of potential conflicts with other objectives: mistletoe, ambrosia beetles. A broom eradication program and management strategy could be scary	WFP Ltd, Summary of Operational Comments, June 25, 2002, p. 13
Result #1 *The licensee must conduct activities to detect forest health factors in a timely manner.*	Unclear and vague statement that leaves licensees with no certainty about expectations and allows government complete licence to download responsibilities, whatever way it is interpreted.	COFI, Comments paper, June 28, 2002, p. 48
	What is "in a timely manner"? How would this be done? Perhaps changing the statement to "the licensee must deal with forest health factors in a timely manner once detected" would be more appropriate.	Weyerhaeuser, North Island Group, May 29, 2002
	One could construe that everywhere needs an "assessment of forest health risks" now.	WFP Ltd, Summary of Operational Comments, June 25, 2002, p. 13
	Detecting FHF's in a timely manner is unenforceable. Determining what is a "timely fashion" is legally difficult. Establishing timelines for forest health surveys with schedules dependent on level of risk associated with stand would avoid any confusion regarding whether a licensee had fulfilled its forest health survey responsibilities	BC Community Forestry Association, June 28, 2002, p. 5
Result #2 *The licensee must conduct activities that will address identified forest health factors.*	Unclear and vague, fulfilling it may result in legislated non-compliance with riparian and silviculture results and rules. It does not have a mechanism to provide for socio-economic considerations in making decision about	COFI, Comments paper, June 28, 2002, p. 49

	conducting forest health activities that is required to make it workable	
	Results 1 and 2 sound more like process than results (the old regime lives)	Pope & Talbot, Randy Waterhous, June 28, 2002
Result #3 *The licensee's management practices must not exacerbate the negative influence of forest health factors on the productivity of the land-base.*	Not possible to achieve this result in many areas. Result does not recognize that some actions required will conflict with other Code requirements or exacerbate other pest problems. Need for different results on different zones in the landscape, where actions in a "timber emphasis zone" may be different from a "special management zone."	COFI, Comments paper, June 28, 2002, p. 49
	How can compliance be audited in the absence of a long-term area-based tenure? i.e. plant spruce on a tomentosus infected site, not to see the results until 30 years later. A bad result often shows up too late. Partial solution would be to have Forest Health incorporated into the 8 management regimes and possibly the 5th test for RDP approval would be to show that the licensee had managed Forest Health appropriately. What incentive does a licensee have to manage for forest health if the government will take over when reaches an epidemic state?	Northwest Natural Resources Network, June 12, 2002
	Could be a problem with respect to the non-recoverable windthrow losses at the edge of cutblocks and with retention of mistletoe infected trees in RMZ. No escape clause in the goal statement. Leaving saplings and non-merchantable timber, some may be infected by mistletoe, along S4 streams could have negative influence on the productivity of the land-base while being good for stream and biodiversity – should be part of assessment of achievement of the goal?	WFP Ltd, Summary of Operational Comments, June 25, 2002, p. 13
	What specifically would be a situation where management practices 'exacerbated the negative influence of FHF's'? Could partial cutting in a stand with armillaria root rot be considered as exacerbating FHF's?	BC Community Forestry Association, June 28, 2002, p. 5

Result #4 *Management of forest health factors will occur in a manner that will result in achievement of objectives or results for other values.*	Results is completely unachievable and conflicts with other rules and results (i.e. CWD requirement may exacerbate bark beetle management issues), essentially legislated non-compliance. The most that can be required is that management of forest health factors to be consistent with objectives of results for other values.	COFI, Comments paper, June 28, 2002, p. 49
	Support this result, that managing for FHF's is not an excuse for failure to meet objectives for ecological values. Note that retaining romance forest patches and stand structured (e.g. CWD) as well as using diverse silvicultural systems, is key for maintaining biodiversity and the resilience of ecosystems in resisting or recover from disturbance. Also, reducing stand and landscape diversity through clearcutting may actually "increase the susceptibility of these forests to larger MPB outbreaks in the future."	WCEL, June 2002, p. 36
	Result 4 is contradictory with previous discussion about exemptions for WTP's or old forest retention.	Pope & Talbot, Randy Waterhous, June 28, 2002
	Assumes that the achievement of objectives or results for other values can be compatible with the management of FHF's (i.e. try with mistletoe infected stream buffers). Should be reworded to "Management of forest health factors will be balanced with other resource management objectives and results" (similar to CWD, and allowing escape clause)	WFP, Summary of Operational Comments, June 25, 2002, p. 13
Rule #1 *A person transporting and storing timber must prevent or minimize the spread of forest health factors or invasive plants.*	Rule cannot be followed, as there are circumstances where any transportation or storage approach will cause spread of forest health factors. Not fair to hold licensees accountable for results that are beyond their control.	COFI, Comments paper, June 28, 2002, p. 49
	Results are vague and unenforceable. The first two results are not results, but vaguely expressed rules. The third is a worthwhile result, but expressed so as to not be enforceable	WCEL, June, 2002, p. 36

Rule #2 *A person who uses trap trees or pheromones to concentrate insect populations must ensure that the insect brood is destroyed before the insects emerge.*	This is an absolute requirement that cannot be achieved, and without variances the utility of this tool is limited. Best used in isolated locations to address scattered and spot outbreaks. Situation may not be possible to extract timber, so responses other than destroying the brood need to be allowed (i.e. successive years of baiting or traptreeing). Rule appears to be redundant when licensees operating to a result.	COFI, Comments paper, June 28, 2002, p. 50
Rule #3 *A person carrying out a forest and range practice must take action in a timely manner to prevent, minimize, or contain the spread of forest health factors including invasive plants.*	Rules as proposed are fine in intent, but are insufficient to accomplish the desired results, needing more detail to be meaningful and enforceable. Requires much greater definition in the third Rule, and the development of additional rules to achieve the intent of the goal statement and results	WCEL, June 2002, p. 36
	Rule could force licensees to utilize expensive resources to deal with a relatively minor problem. No provision made to allow licensees to balance the cost of actions with the cost of the health factor or the likely impact of the action. Rule appears redundant for licensees operating to a result.	COFI, Comments paper, June 28, 2002, p. 50
Exemption #1 *Where otherwise prohibited by law, the District Manager may set conditions to allow sanitation harvesting of infested timber in riparian areas, sensitive ecosystems, areas adjacent to non-green-up areas in order to reduce the spread of damaging pests*	Providing for ad hoc exemptions and variances from fixed rules and results is more complex and resource intensive than allowing licensees to specify results in the initial application process.	COFI, Comments paper, June 28, 2002, p. 50
	Key requirement is for proactive monitoring and strategic intervention to avoid exacerbating forest health problems – hinted at here, but vague. Needs to be a much greater definition of the desired on-the-ground results – FPB audits may be of help	WCEL, June 2002, p. 36
	Strongly advocate and support routine consideration of other forest values during application of "forest health management", and therefore are opposed to exemptions 1 and 2. With an emphasis on performance rather than planning, it should be possible to address all of the values listed in 6.2.1, 6.2.2, and 6.2.3. Exemptions are an invitation to ecosystem abuse, is contrary to WLAP's biodiversity objectives, and is potential devastating to individual trapline holders in affected areas.	BC Trappers Association, June 15, 2002, p. 7

Exemption #2 *A licensee may be exempted from meeting certain land use objectives or achieving specified results when in receipt of an order to manage forest health factors.*	Licensees should be exempted from rules as well as objectives and results. Licensees need the flexibility to act quickly to address forest health concerns even when not in receipt of an order. Broad exemptions across the entire regime are required to facilitate these actions.	COFI, Comments paper, June 28, 2002, p. 51
Exemption #3 *Minor sanitation harvesting (less than 2000 m3, or 5 ha) to manage endemic occurrences may occur without an RDP*	The exemption section is overly broad and had no test or limitations on its exercise. This could lead to avoidable harm in riparian areas, sensitive ecosystems and land use objectives. Any exemptions should be limited to situations where the ecological integrity of the forest ecosystem is at risk, and not merely to protect timber values.	WCEL, June 2002, p. 37
	More restrictive exemption than the current Code, and may put licensee in conflict with other results and rules. The mechanics of managing a cutting permit and road permit without an RDP are not clear.	COFI, Comments paper, June 28, 2002, p. 51
Statutory Power #1 *Certain officials will have the authority to declare a forest health emergency and require licensees to employ measures to prevent or contain the spread of forest health factors*	There must be a limit on this authority and some requirement to consider the economics of the situation. As it stands, licensees could be required to incur significant costs to protect low value timber for which they have no rights or responsibilities. The ability to allow industry to respond quickly to emergency situations by eliminating some requirements must also be established.	COFI, Comments paper, June 28, 2002, p. 51
	"Certain officials"... which ones? Authority should be limited to ensure the official has all the appropriate facts and the licensee has the right to be heard. Do the statutory powers apply to forest health scenarios in Parks?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
	Clarity is required around the management of invasive plants. this section seems to state that forest licensees must mitigate the impact of invasive plants that occur and spread despite anything that the licensee may have control over.	Pope & Talbot, Randy Waterhous, June 28, 2002
	The complete absence of any discussion about when an emergency could be declared makes it difficult to comment on the appropriateness of this	WCEL, June 2002, p.

	approach.	37
Statutory Power #2 *These officials will have authority to order licensees to implement appropriate treatment on specified areas to prevent damage or destruction of timber by forest health factors*	This is far too discretionary, decision makers must take into account costs and benefits in these circumstances	COFI, Comments paper, June 28, 2002, p. 51
Statutory Power #3 *A regional manager may issue an order to a person to immediately treat forest health factors on private land that pose a risk to adjacent Crown land, and require that this person comply with the order*	Each of the three powers involves issuance of an order and action required by the licensee/private land owner. Who is expected to pay for these treatments? We suggest that if licensees are obligated by government to take action, that government pay for the action taken	Weyerhaeuser, North Island Group, May 29, 2002
	Power should be differentiated from the Schedule A (private land) in a woodlot licence. This section diminishes the rights of a private property owner.	Federation of BC Woodlot Associations, June 2002
Notification and Information Requirements: *Licensees must identify and document the presence of forest health factors and invasive plants, and develop management strategies. They must make this documentation available to the District Manager on request.*	Not tied to any decision making requirement, is a straight downloading of responsibilities to licensees, does not contribute towards the objectives of reducing costs, and is worse than the existing Code.	COFI, Comments paper, June 28, 2002, p. 52
General Comments	Overall, results and rules create uncertainty about what is expected, what area the licensee will be responsible for, and what is permitted. They are impossible to achieve and do not allow for costs and benefits of alternative approaches to forest health to be considered. Industry costs will increase. Flexibility that was built into the Code to deal with emergency forest health situations has been reduced. This approach is contrary to a results based approach – should not require extensive rules and exemptions. Do not support these broad statutory powers of intervention. They leave	COFI, Comments paper, June 28, 2002, p. 48-51

	licensees responsible for costs over which the have no control.	
	the proposed rules and results do not represent an equivalent approach to the current Code, where there was a proactive requirement for the evaluation of FHF's, and to carry out forest health assessments if required by the DM, with the results incorporated into the FDP. lack of general information requirements and silviculture prescriptions undermines proactive management and enforceability. Forest Health issues need to be enforceable and enforced, and that penalties be large enough to deter actions which intentionally or negligently undermine forest health. Some situations the licensee has incentives to address forest health in a proactive and strategic manner, and others where it's better to wait for cheap wood at salvage rates in the future. With FDP's being approved for up to five years, no real ability or incentive for the licensee to adapt to address forest health factors. No ability for the DM to address concerns under limited tests available. The Term "forest health" should be clearly defined to exclude operations where the economic value of the timber, but not the ecological integrity of forests, is threatened. Recommend the RBC impose rules which require assessments of forest health. Where issues are found, licensees are required to report those results, along with a plan to address them, to the DM. The DM then could a) adopt the plan; b) modify the RDP; or c) order the licensee to take action	West Coast Environmental Law, June 2002, p. 36
	How will the situation be dealt with when one licensee's lack of forest health management impacts another's? Will there be compensation? How have the benefits associated with the bark beetle management regulations been incorporated into the RBC? The regulation allowed for up to 15 ha to be developed with expedited administration. If the MoF can order people to deal with forest health issues on private land, why can't they do the same for Provincial Parks?	West Fraser Mills, Ripmeester/Witala, June 12, 2002

	Forest Health sections in the discussion paper, and particularly the companion document, are weak and insufficient. Forest Health information included in the newly-released DFAM documentation is equally unsatisfactory. Forest Health problems are occurring at an unprecedented rate due to climate change and species invasions. Because of its critical importance to sustainability, requirements for forest health planning, monitoring and prevention must be accorded a higher status within the RBC. This section could work if the DFAM agreements were area-based tenures, but appear weak and short-term.	Northwest Natural Resources Network, June 12, 2002, p. 20
	Statutory power section could add costs if a forest health emergency occurs. Assume #2 only applies to an emergency, if not, MoF becomes the manager of FHF's on all cutblocks and dictates what we have to do. Whistler area mountain pine beetle in non-commercial forest types. How do we address this type of risk? Don't like this section at all, as it imposes far more responsibility on licensees and, theoretically, could lead to huge expenses. Obvious conflict between retention harvesting requirements and loss of productivity associated with mistletoe. From Companion Document 3, we only harvest windthrow timber where it is feasible (economic and physical); the DM does not order us to salvage windthrow as a rule, and don't want windthrow to become FHF and subject to orders of salvage if it doesn't make sense to do so. The elements against which industry's performance will be measured is key. Although specific standards may vary between zones, the method of measurement must not be open to interpretation by various enforcement officers (i.e. wide range of interpretation of "timely manner")	WFP Ltd, Summary of Operational Comments, June 25, 2002, p. 13

6.2.6 Roads, Stream Crossings and Access Management

Results Based Code	Summary of Submission	Stakeholder
***Goal Statement**:* *Roads that are constructed, maintained, or deactivated on the provincial forest land base will be stable, safe for users, and will achieve results and objectives stated for forest and environmental values.*	No time frame is given, so liability appears to be open-ended. Is the licensee responsible for a stable and safe road only until the end of their free-growing obligations after which it becomes the government's liability?	Northwest Natural Resources Network, June 12, 2002
Result #1 *Construction and maintenance and deactivation of roads, pioneer or tote roads, landings, bridges and any other form of watercourse crossing will result in roads, drainage systems and crossings that are structurally sound, stable, safe for users, and will, where relevant:* - *prevent slope failures and landslides, and minimize the introduction of silt to watercourses;* - *maintain water quality;* - *maintain stream channel integrity;* - *maintain surface drainage patterns;* - *conserve wildlife habitat including riparian vegetation;* - *prevent harmful alteration, damage or destruction of fish, fish habitat or fish passage; and,* - *prevent degradation of water quality at the water supply intake in a community watershed*	How will minimizing the introduction of silt into watercourses/water quality and stream channel integrity be measured? In a results based environment it is imperative that we as a licensee know what we should be measuring and what tolerances or bounds we will be measured against. Can a closed bottomed structure be installed in a fish stream without harmful disruption and alteration of fish habitat?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
	DFO is making its presence felt to a much larger degree in the interior of BC. What the licensee thinks is satisfactory and what the various government agencies accept may be far apart. Preventing slope failures and landslides during road construction and deactivation is probably not practical. Every disturbance on the landscape has some risk involved(mostly, the risk is negligible, but it is always there) We can minimize risk. We can also conserve riparian vegetation where practical, but it is not always practical. Some kind of economic consideration should be added.	Pope & Talbot, Hakon Nielsen, RPF, June 28, 2002 Doug Noren, RPF, June 28, 2002
	unless the terms "sloe failures" and "landslides" are defined differently, these terms are redundant. If the intent of the term "slope failure" is to capture small-scale failures such as sloughs and raveling, then I disagree with its incorporation into the RBC. Small-scale failures may occur that are generally inconsequential, and are more of a road maintenance issue than anything else. Landslides are probabilistic events, and therefore impossible to prevent.	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 30, 2002

	Replace "prevent" with "minimize"	
	results stated are unmeasurable. much simpler to abide by the rules (which are clearly stated) than it is to ensure "water quality is maintained". What level of sedimentation, for example, would separate "maintained" from "impacted" water quality? What time frame is attached to impacting water quality, the year of construction, or 50 years into the future? Without baseline data, the result is unenforceable. To obtain suitable baseline data to determine what the normal level of water quality is for a creek would take years of detailed and specific data collection. Its is much simple to have clear rules of operation for dealing with road construction and maintenance.	BC Community Forestry Association, June 28, 2002, p. 5
	The results specified assume that road building can take place without having any impact on the natural environment. This is not possible, nor is it possible to quantify or measure these results. "prevent slope failures..." not achievable "maintain water quality, stream channel integrity, and surface drainage patterns" are neither easily measurable nor achievable "conserve wildlife habitat..." impossible to comply with this requirement at the footprint of road development within the road prism. "prevent harmful alteration..." result is already the requirement of the federal *Fisheries Act*. The framework fails to address the overlap duplication in provincial and federal statutes. "prevent degradation..." worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 52/53
	The phrase "where relevant" renders this section so ambiguous that one cannot know what is intended. It is not logical to say that roads will "prevent" slope failures or "maintain" water quality. The objective should be to minimize the risks associated with roads by proper site assessments, design, maintenance, and deactivation.	Giles, et. al, June 29, 2002, p. 2

	This section does not mention planning, location, design, or risk which are critical in minimizing the probability of occurrence and consequences of road related landslides. The typical occurrence of road related landslide damage off-site and many years after construction is not recognized. There also should be recognition that negative results can occur far downslope from roads decades after construction.	
	Most seem subjective for "measurable results" and depending on interpretation of "maintain" may be unachievable. No change from the prescriptive FPC. We require the ability to clump minor surface drainages, NCD's, seeps, etc. into common drainage structures as a cost saving measure. Very common on wet sites. By definition, road building cannot "prevent" slope failures and landslides. At best one can seek to minimize the risk of landslide or slope failure. "maintain stream channel integrity" – does installing a pipe culvert achieve this?	WFP, Summary of Operational Comments, June 25, 2002, p. 14
	There is a potential contradiction between the requirement to "maintain" surface drainage patterns in road construction and maintenance, and "restoration" with respect to deactivation. Where the latter is intended to deal with situations where the first is breached, suggest there be a general requirement for remediation where any result has been breached. Then the word "restoration" could be amended to "maintain".	West Coast Environmental Law, June 2002, p. 37
Result #2 *Deactivation of a road will result in:* 1. *limiting access on the road to motor vehicle traffic consistent with legal objectives;* 2. *restoration of natural drainage patterns;* 3. *removal of bridge and log culvert superstructures;* 4. *removal of bridge or log substructures if the failure of a bridge or log culvert substructure*	If the results of deactivation are specified in Result #2, then deactivation should be removed from under Result #1, and vice versa. This section needs to be reworded and clarified to assess the actual implications of the proposed changes.	Weyerhaeuser, North Island group, May 29, 2002
	The requirement for the restoration of "natural drainage patterns" is too open-ended and unrealistic to be enforceable. A blanket requirement to remove bridge and log culvert superstructures may completely cut off access to an are for future silviculture activities, fire	Northwest Natural Resources Network, June 12, 2002

would affect downstream values; 5. *removal of all stream culverts and restoration of fish passage and protection of fish habitat; and,* 6. *re-establishment of ecologically suitable vegetation that will protect soil and, where applicable, provide forage and control invasive plants.* *The licensee is whoever is authorized to construct or deactivate a road, landing or crossing, or is required to maintain it.*	protection options, and public access will be eliminated. Deactivation requirements are unclear. No distinction is made between permanent and temporary deactivation. Terms such as "ecologically suitable vegetation" require further clarity.	
	"re-establishment of suitable vegetation..." new requirement, for licensees to re-vegetate all deactivated roads regardless of soil conditions and down slope values. This result equals a "one-size-fits-all" approach, which is inappropriate for some sites and will add cost. Solution-based exercise: A forestry team meets with government agencies to discuss a protocol detailing where re-establishment of suitable vegetation is required. The requirement should be based on site specifics risk and consequence to down slope resources. Erosion control should be based on soil condition (i.e. highly erodable soils) and proximity to fish, water intakes, etc. The desired result should consider current science and ecological significance.	Interfor, Bob Craven, RPF, June 25, 2002, p.2/3
	"restoration of natural drainage patterns" should state "restoration of natural surface water drainage patterns" as road construction also disrupts subsurface drainage patterns. Even with a complete de-build of a road, it is unlikely that the natural subsurface drainage pattern would be completely restored. There needs to be a bullet indicating the level of deactivation (permanent, seasonal, temporary) that would be done in accordance to the level of risk associated with the road with consideration given to future access needs. There needs to be a bullet indicating that once the road deactivation results have been achieved then the licensee would be discharged of the associated road liability. A professional reliance model could incorporate sign-off by a qualified professional leading to release of liability by the government.	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 30, 2002
	A results-based regime does not require this extensive list of results. The result of deactivation should be a feature of the plan itself. "limiting access..." not clear what is implied with "legal objectives" but it	COFI, Final Comments paper, June 28, 2002, p. 53/54

	would appear to be a redundant statement. "restoration of natural drainage patterns…" impossible to achieve total drainage restoration. "removal of bridge and log culvert superstructures…" there is no indication of who determines, what test would be applied to affected values, and what downstream values are being contemplated. "removal of all stream culverts…" wording is too vague. This is more restrictive than the current Code, which allows culverts to be retained in permanent deactivations. "re-establishment of ecologically suitable vegetation…" this is a new requirement that will significantly increase costs and is not related to deactivation.	
	When bridges or culverts are removed, the trappers require sloping creek banks as opposed to drop-off banks to facilitate snowmobile travel	Ft Nelson Trappers Association
	When should deactivation take place? Right after harvesting and reforestation, or delayed until the crossing structures are near the end of their functional lifespan? Consideration to fire protection access, public access maintained if licensees compensated by the Crown to do so. Bullet #5 – The term "protection of fish habitat" should be changed to rehabilitation of fish habitat as that is what would have to occur at a deactivated culvert crossing site on fish streams.	D.C. Morrison, June 30, 2002, p. 5
	Limiting access on deactivated roads consistent with legal objectives needs expansion/clarification. It was not clear what is intended here. This is a definition of permanent deactivation. There is no recognition of the three types of deactivation used under the current FPC – arguments with MoF over the status of roads (permanent, temporary) and the resultant type of deactivation (permanent, semi-permanent, seasonal) were non-stop and a constant source of additional costs to industry. To designate one type of deactivation will not solve the problem. Industry should be able to choose	WFP, Summary of Operational Comments, June 25, 2002, p. 14/15

	the status of roads under their road permits and manage accordingly, without MoF interfering or imposing their interpretations which varied substantially depending on who and what district was involved. "limiting access… consistent with legal objectives" What does this mean – landscape objectives? If the road is to be maintained for e.g. park access under "legal objectives" who pays to maintain it? "removal of bridge and log culvert superstructures" Why? Is there no semi-permanent deactivation using fail-safe measures under the RBC? Is the licensee then forced to either maintain a road in perpetuity or totally deactivate and then rebuild the road 10 years later to access other timber? This is contrary to several objectives of this paper. "removal of all stream culverts" same comments. It should be at the discretion of the licensee whether to leave culverts in-place and provide fail-safe measures.	
	roads, bridges, etc., which trappers have been using for decades have been deactivated for no apparent reason other than to limit access. This has occurred generally without consultation and has had a dramatic effect on the operations of individual trappers. We recommend that a consultation process be instituted with respect to access management and that no activity should proceed without input from all tenure holders.	BC Trappers Association, June 15, 2002
	This is not specific enough. Does this relate to "permanent" deactivation? Is there no allowance for leaving culverts in the roads (i.e. semi-permanent and temporary deactivation). May result in maintaining more road. Who determines "ecologically suitable" vegetation? Will this result in the use of expensive seed mixes?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
Rule #1 *Drainage systems must be functional during construction of a road.*	It is not possible to have drainage systems functioning while they are being constructed. The rule does not take into account winter roads where this rule would be counter productive. It is impossible to follow the rule.	COFI, Final Comments paper, June 28, 2002, p. 54

Rule #2 *Road construction works must be outside a riparian management area, except at stream crossings, unless there are no practical options or there is a higher risk to resources*		
Rule #3 *Equipment crossings of a stream during road construction must be at one location only.*	This requirement is overly constraining for non-fish streams and/or streams with no RDP identified downstream values. Worse than the existing Code as it applies to all streams and does not provide for variances.	COFI, Final Comments paper, June 28, 2002, p. 54
Rule #4 *The clearing width for a road, and width of the finished road prism, must not exceed that required for user safety and operational requirements.*	Rule is open for infinite interpretation, for example, an operational requirement for gravel may necessitate a 75m clearing width for aquiring stabilization material.	
Rule #5 *The clearing width for a road at stream crossings cannot be widened to accommodate bridge or culvert material storage sites, landings and equipment turn around sites*	This restriction on clearing width at stream crossings is impractical for those larger streams where larger bridge structures are required. As such sites, room is required for cranes, bridge assembly, safety, etc. Again, too prescriptive.	WFP, Summary of Operational Comments, June 25, 2002, p. 14
	This rule is currently an option in a Guidebook and is now being converted to legislation. It will result in cost increased and reduce flexibility. This requirement removes option for non-fish streams where such activity is not an issue as long as sediment control is looked after.	COFI, Final Comments paper, June 28, 2002, p. 55
Rule #6 *Exposed soil that will support vegetation must be re-vegetated, to provide for soil erosion protection and control of invasive plants*	need long time period allowed, as natural vegetation should be acceptable in low risk situations. Licensees should not be forced to seed roads right after construction in areas to be logged. It should be acceptable to seed following harvest completion (otherwise ending up seeding many areas once after road construction, and again, soon after logging disturbance) Do not agree that all soil that will support vegetation must be re-vegetated. Again a constant source of irritation between licenses and MoF personnel. No recognition of risk. Many sites are low risk and will re-vegetate naturally	WFP, Summary of Operational Comments, June 25, 2002, p. 14

	with time.	
	This rule is all encompassing and ignores a risk and impact assessment and impact approach. It should only apply to those areas that have been identified as having significant erosion concerns or where RDP identified downstream values may be adversely impacted.	COFI, Final Comments paper, June 28, 2002, p. 55
Rule #7 *Fuel, lubricants and servicing fluids must be controlled or contained*		
Rule #8 *Rock that is from an acid-generating rock formation must not be used for road surfacing and ballasting unless acid generation is mitigated*	Rule requires more precise specification. As currently written, many of the standard road-building rock sources in northwestern BC would no longer be permissible.	Northwest Natural Resources Network, June 12, 2002
	Rule should be amended to delete "unless acid generation is mitigated". This is too vague, does not specify a clear outcome, and more importantly raises a potential conflict with the *Waste Management Act*.	
	How is this determined?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
Rule #9 *Rock blasting and handling must not damage resources adjacent to the worksite*	Unattainable – suggest "minimize damage." Blasting is no a perfect science and it is unreasonable to expect no damage to adjacent forest on every blast. If it were reasonable, workers wouldn't have to clear the site during a blast. Reword to "reasonable efforts must be made to avoid damage to resources…"	WFP, Summary of Operational Comments, June 25, 2002, p. 14
	This rule is not achievable.	COFI, Final Comments paper, June 28, 2002, p. 55
Rule #10 *A person who constructs and maintains a road must*	Disagree that all stream culverts must be designed for 100 year return period. The licensee should be able to determine type of road and manage accordingly. FPC definition between permanent and temporary bridges was	WFP, Summary of Operational Comments,

construct bridges, stream culverts and their approaches that will pass the peak flows set out in the following table: *Minimum design peak flow* *All stream culverts* — *100-year return period* *Permanent bridges* — *100-year return period* *Temporary bridges* — *50-year return period* *Except that:* a. *A stream culvert may be constructed at a crossing to meet the expected flow during the period of use if:* - *the stream is not a fish stream;* - *the installation and use will be in a period of low stream flows;* - *there will be no future crossings in this location; and,* - *the culvert is removed before the period of high flows, and* b. *A bridge may be constructed at a crossing to meet the expected flow during the period of use if the pieces at risk are removed before the periods of high flows.*	based on construction material used in the structure, not how long it was to be installed. Temporary should include portable steel/concrete structures. Designed fords should be a recognized drainage structure – unclear under present wording if that is the case.	June 25, 2002
	It would be more practical and cost effective to allow variances for temporary roads. It is also advisable to provide a rule stating when design by a professional engineer is required – it is not clear this is adequately addressed in Rule #13	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 30, 2002
	The minimum design peak flow in this rule are as currently required in the Forest Road Regulation. It appears the exceptions below are the first attempt to provide licensees some opportunity for flexibility. In sub-Section a. – Overall this section appears to be going in the right direction. Bullet three can be eliminated, as it is redundant if all other conditions are met.	COFI, Final Comments paper, June 28, 2002, p. 55/56
Rule #11 *Downloaded bridge ratings signs must be installed on all bridge approaches, if the bridge cannot support the design vehicle load for the road.*		

Rule #12 *The licensee must duly notify all users of potential risks to public safety resulting from their activities and will provide appropriate notice to water purveyors of road construction or deactivation works in a community watershed*	Duly notifying the public should be limited to posting signs.	Federation of BC Woodlot Associations, June 10, 2002
	It is not clear where this rule will apply. Licensees need a clearer definition of what notification is required, to whom and where it must be supplied, otherwise this rule creates uncertainty. Need clarification on who is water purveyor and if the rule only applies in a community watershed.	COFI, Final Comments paper, June 28, 2002, p. 56
	Too lose. If interpreted strictly it could be unrealistic.	WFP, June 25, 2002, p. 14
Rule #13 *Bridge design and fabrication must conform to the Canadian Standards Association, Design of Highway Bridges, CAN/CSA-S6, and the Canadian Foundation Engineering Manual*	The RBC states that references to guidebooks will not be made legally enforceable. The bridge manuals referenced here are generally intended to provide guidance to designing engineers who in turn must take professional responsibility for the structure – they do not belong in the rules. How do the SDM's determine if the structures are adequate? Is that not the job of the designing professional?	West Fraser Mills, Ripmeester/Witala, June 12, 2002
Rule #14 *The licensee must inspect steel and concrete bridges at least once every three years, and log bridges at least once every two years*	A more results based method would be to have the inspection frequency determined by the qualified inspector.	West Fraser Mills, Ripmeester/Witala, June 12, 2002
Cross reference: *See RDP Approval Test #2 under Section 5.3* *Prior to issuing an RDP, the District Manager must be satisfied that an RDP will meet land use zones and objectives set by MSRM for forest road access management.* *These objectives will be set for landscape scale areas by MSRM where access on forest roads*	This is an open-ended power that will off-load costs for access and deactivation for activities that are not related to licensee activity. More information is required to clarify how this swill be implemented and funded.	COFI, Final Comments paper, June 28, 2002, p. 57

represents a hazard to forest and environmental resources, or where such access must be managed to meet land use objectives.		
Statutory powers: *1. SDMs may issue an order compelling a licensee to do certain things to address risks of imminent and catastrophic impact on public health, safety or the environment. Failure to comply with the order could result in enforcement action.* *2. SDMs will have authority to determine if structures have been adequately designed with respect to public safety hazards, or risks to the environment*	Who specifically will be vested with SDM authority? Under the current Code decisions made by over-zealous, inexperience forest officers have resulted in costly and unnecessary demands. The SDMs or their designates must be experienced people. qualified to make such decisions and orders and the government must be held accountable for these decisions.	WFP, Summary of Operational Comments, June 25, 2002, p. 15
	Do not support broad unspecified powers that create uncertainty, potential cost increases and operational problems for industry. This could result in completely unfair requirements where for example licensees are required to maintain roads for other users. This can be applied where no contravention has occurred. Only a professional engineer can determine the safety of design.	COFI, Final Comments paper, June 28, 2002, p. 57
Information Requirement: *Inspection records, and materials fabrication and construction data, will be maintained for the life plus one year of any bridge structure, and will be submitted to successive licensees*	Inspection records can be kept on file and available on request.	COFI, Final Comments paper, June 28, 2002, p. 57
General Comments	There are major shortcomings in three areas: access management; road density; and road location. Results and rules need to be developed to address these important issues.	WCEL, June 2002, p. 37
	Unacceptable for MoF to relinquish control over where roads are to be built. As now written, there is no requirement for a licensee to state exactly where they are planning to locate a road, and no requirement that they employ qualified professionals in this task. This is a serious reduction in environmental standards. The roads section of the discussion paper does not mention planning, location, design, or risk. What the RBC includes in its goals and results will	Peter Jordan, PhD, PGeo, June 28, 2002

	set the expected standards for due diligence – by not mentioning these things, we are setting the bar very low as to what we expect from licensees.	
	Forest management economics, and protection requirements assessments, must be included in criteria used to schedule access de-activation. Design criteria for roads, bridges, and other structures must be established by the independent professionals, not by government. Roads, brides and other assets paid for with public monies, whether directly or indirectly, should be treated as capital assets, and a suitable inventory system be developed.	Consulting Foresters of BC, June 20, 2002, p.4
	One of the biggest public liabilities associated with forest practices is the risk of road failure, with a significant contributions being a lack of maintenance and the original construction standards (i.e. buried organics on steep slopes) The RBC must reference some established construction standards so we don't exasperate (sic) the present situation of pre-Code and FPC roads and the confusing liability that goes with it. The current FPC *Road Regulation*, with regard to construction practices, was one of the real strengths of the FPC and we should not lose this. We need to make the design and approval of roads and road locations administratively simple but maintain the enforceability of the present Code.	Peter Wright, June 28, 2002, p. 2
	Many of the results and rules in this regime assume that road construction and related activities do not leave a footprint on the land base. As a result some of the proposed rules and results are not achievable. Attempting to achieve them will result in significant cost increases. There is no transition measure describing how existing roads will be managed relative to "objectives and environmental values". approach to offload FSRs to licensees will have significant cost impacts. It is not possible for road construction to achieve results and objectives for all other values; there needs to be an opportunity to manage tradeoffs. The goal statement as written is too open ended relative to "stated objective".	COFI, Final Comments paper, June 28, 2002, p. 52

	The approach described here is completely contrary to the objective of allowing licensees freedom to manage in the delivery of defined results. It is a set of completely prescriptive and redundant rules that are confusing at best, and more likely completely unworkable. It is more restrictive than the existing Code as it applies a number of rules to all streams, not just fish streams, and adds restrictions. The RBC approach to roads does not: • Reduce costs to industry, • Provide freedom to manage, • Consider the economic impact on industry, • Clearly articulate desired results.	

6.2.7 Silviculture

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: Silviculture activities will sustain or enhance the productive capacity and value of the land and forest for timber and non-timber resources at the stand and landscape levels.	It is not possible to sustain or enhance the productive capacity and value of all timber and non-timber values on all sites. It is the nature of forest management that trade-offs and choices must be made; this regime does not allow for these choices to be made. The proposal does not allow for licensees to manage stands to achieve results across a landscape, not restricted to a landscape unit, rather than focusing each individual site. The proposal contains a number of contradictory, redundant or confusing results and rules that thwart proper forest management and are completely contradictory to the objective of giving licensees the ability to manage to a result.	COFI, Final Comments paper, June 28, 2002, p. 58
	strongly support the goal statement, as related to **sustaining or enhancing**…" …. for non-timber resources. Silviculture is another area where trappers have often been left out of the loop with respect to consultation. As licensed tenure holders, trappers have come to rely on notice of activity by licensees with respect to company planning for road building and logging activities, and also need to be involved in silviculture planning. Again, we need a mechanism in place where we may have meaningful dialogue with respect to actions affecting our tenures.	BC Trappers Association, p. 7
	This goal is unattainable in some cases. For example, how would pile burning sustain or enhance the value of the forest for species that like CWD? Another: reforestation will reduce the value of the stand for species that prefer openings.	WFP, Summary of Operational Comments, p. 15
	Goal statement is very broad ("sustain" and "value of the land") considering this section is flagged under 6.2.1 as a primary place where specifics (maintenance of stand structural attributes and species composition) are to be addressed The goal should be that silvicultural systems result in present and projected landscape patterns and stand structures that are maintained, and if necessary restored, to be within the range of natural variability for the area in question.	WCEL p. 38

Result #1 For every area for which a licensee holds a reforestation responsibility, they must establish and maintain a healthy, well-stocked and free-growing stand with no less than the required minimum well-spaced stems per hectare of commercially valuable trees that are ecologically suitable to each site. Free-growing standards will be established in regulation	If stocking standards are place into law this could tend to mute innovation in forest management… % countable conifer height seems inappropriate on the forests I work in – could easily be moved from 20% up to 60% without any fear of injury or risk to the potential crop trees.	Dennis Farquharson, RPF, Tolko Industries, June 30, 2002
	Achievement of this result may not be consistent with the goal statement. For example, sustaining and enhancing non-timber values may mean that commercially valuable trees are not established, or conversely, enhancing the timber values may reduce non-timber values. This is the nature of forest management. Results should be specified at the landscape level, not site level. This result appears to require that industry maintain a free-growing stand for an unspecified period of time. Establishing minimum stocking standards and free growing standards in legislation severely limits flexibility and professional judgment, entirely contrary to the objective providing the industry freedom to manage in the delivery of defined results. This is worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 58
	A requirement to establish the same species mix that occurred before harvest would be fundamentally ecologically flawed. The requirement should be to establish a mix of species that is suited to the conditions resulting from harvesting disturbance, and which meets ecological and economic objectives. The requirement that reforestation achieve full stocking with native species soon after timber harvesting is widely respected from the perspective of resource stewardship and conservation biology. But experience over the last decade or two has indicated that it is often "too successful," at the expense of other forest values and at the expense of forest licensees. If unnecessary or solely "regulatory" brushing could be avoided, this would contribute to cost efficiencies in the Ministry of Forests, and to the global competitive advantage of our forest products companies, at the same time as reducing the use of herbicides. Reduced brushing and more diverse managed stands will further support forest certification and will engender widespread support	Northwest Natural Resources Network, p. 22

	among First Nations, wildlife managers, non-timber forest product users, and environmental organizations. *Here's what the RBC needs to include with regard to this issue:* Accept and encourage a wide range of stocking and site occupancy by commercial tree species, so long as these levels are explicit and are reflected in timber supply analysis; Allow silvicultural prescriptions to state free-growing standards in terms of sampled tree growth, expressed in absolute terms (e.g., of annual leader length or height to basal-diameter ratios), or relative to the potential of specific species and site combinations. That potential might be derived from local databases, or from control lines of brushed and monitored seedlings in each stratum on site. While forest regeneration requirements may not have to be proven until 20 years after logging, this latitude should be coupled with the requirement for a licensee to specify their own indicators of compliance and management success, plus a system of monitoring to allow feedback in time to take corrective action. For example, a more RBC-compatible specification for stocking and free-growing standards, as stated in a silvicultural prescription and to be used for internal management purposes, might read something like this: "Target stocking after regeneration is 1200 sph, with 20% of systematic survey plots permitted to have crop stem densities <800 sph or >1600 sph. "Free-growing status, to be determined 7 to 9 years after logging, will require that 80% of tree-centred survey plots support crop trees achieving >70% of their potential for the site, according to the following standards, derived from our experience with average growth of free-growing trees on analogous sites elsewhere in the SBSmc2: Crop Species Pli, on Site Series 02 and 01, has potential leader length of 43 cm	

	Crop Species Sx, on Site Series 01, has potential leader length of 22 cm Crop Species Sx, on Site Series 05 and 06, has potential leader length of 26 cm" If such alternatives for specifying stocking an free-growing standards are implemented in a true results-based fashion, there will be no impact on stand growth and yield; so long as the rate of cut truly reflects timber stocks and their rate of growth, there will be no impact on timber flow. Yet costs can be potentially reduced, silvicultural innovation will be promoted, habitat restoration needs will be averted, and numerous non-timber forest values will be promoted.	
	Regulation requires each cutblock to have free growing standards assigned to it (and not specifically state what they will be). The prescribing foresters would then establish free growing standards on a site-specific basis, to ensure that the productive capacity and value of the land is captured. This will allow for more flexibility and eliminate the requirement to apply for variances (more paperwork) on a site-specific basis.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	Without being able to review the free-growing standards, which are to be established in regulation, it's impossible to offer informed comments on this section. The expectation is that silviculture and reforestation standards will be stated as results and not a series of checkpoints such as planting quality, survival check, regeneration delay and free-growing date. Furthermore, the option of having a stand declared free-growing before the final free-growing date will still be possible.	Federation of BC Woodlot Associations, p. 7
	Licensee… must… maintain… free growing stand – this is a major added responsibility for licensees if there is no closure of liability. At some point the Crown has to retain some responsibility for their resource. *Free growing standards will be established in regulation.* The regulation must allow for approval of local-level stocking standards to reflect local ecological conditions and the long-term management objectives of the	WFP, Summary of Operational Comments, p. 15

	licensee, as suggested by the proposed exemption. We need to eliminate regen delay date currently in the free growing stocking standards. It is an administrative burden. We need to be judged at free growing if we truly want a results based code. It is already an incentive for us to establish crops quickly to reduce future brushing treatments, meet green-up heights more quickly and to help favour timber supply numbers amongst other things.	
	Free growing standards included in regulation will only lead to additional plan approvals. A better result to consider would be maintenance of site productivity (MAI or Site Index). This is the approach of some TFL's and is ultimately the result that is desired from a perspective of sustaining forest productivity. Whether this wood is grown on many or few stems is irrelevant. In fact it may be beneficial to have a variety of products growing for the future.	Wes Beiber, RPF, June 15, 2002
Result #2 Licensees must achieve government's land use objectives for non-timber values	Results 1 and 2 will be mutually exclusive on many sites, creating legislated non-compliance. Result 2 implies that all objectives must be met on all sites – this is impossible to achieve with silviculture alone and is redundant since the objectives for non-timber values are addressed in other tests, results and rules. The wording also perpetuates the notion that timber is the last resource to be considered. No mechanism to consider social, environmental and economic priorities, different in each zone, is provided.	COFI, Final Comments paper, June 28, 2002, p. 59
	Government's land use objectives for non-timber values must be economically appropriate and not overly restrictive of the timber resource.	WFP, Summary of Operational Comments, p. 16
	Concerned that protection for non-timber values are limited to situations where legal objectives are in place (result 2) and the only reference to maintaining site and stand productivity is linked to partial cutting (result 3) implying, incorrectly, this is not an issue with clearcutting.	WCEL, p. 38

Result #3 When using partial cutting, licensees must take all reasonable measures to protect site and stand productivity, commercial value, and non-timber values where specified by legal objectives	This result will be internally inconsistent on some sites; trade-offs must be made during the process of forest management. Another case of legislated non-compliance. This is worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 59
	Some of the "results" are very poorly worded. For example, "when partial cutting, licensees must take all reasonable measures to protect site and stand productivity, commercial value, and non-timber values where specified by legal obligations". This should be a fundamental "rule" regardless of the cutting/silvicultural system used.	Northwest Natural Resources Network, p. 22
	Why is this applicable only to partial cutting? The first section of this statement should be removed.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	Some forms of partial cutting can lead to high-grading, leaving a stand of lower quality and value. this may not be entirely compatible with goals and results of government. RPF's are in a position to minimize this risk.	WFP, Summary of Operational Comments, p. 16
	Result 2 is extremely open ended, only requiring licensees to take "reasonable measures"	WCEL, p. 38
Result #4 A licensee must sustain plant community representation and tree species composition typical of the ecosystem at the landscape level. Where legal zones and objectives for species composition are set, those objectives prevail	local practicing foresters do not need legislation in order to determine appropriate species selection	Dennis Farquharson, RPF, Tolko Industries, June 30, 2002
	With the harvesting of a cutblock, the plant community representation will change. Is this section related to leaving a wildlife tree patch that is representative of the harvest area in terms of species composition and plant community representation? In what detail are we required to inventory the landscape? This is a reasonable rule if it means that a WTP (of reasonable size) representative of the harvest area will be retained.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	If we assume this means typical of the ecosystem under natural conditions the "required results" would be unattainable because in wetter coastal areas,	WFP, Summary of Operational Comments,

	plant communities under closed second growth canopies are different than those found in natural conditions. Similarly, these "required results" for tree species composition would limit silviculture choices (e.g. would not allow for our silviculturally and economically justifiable use of Douglas fir at greater than natural levels).	p. 15
	Who will decide what is appropriate particularly as movement between seral stages is normal and expected?	West Fraser Mills, p. 3
	This result may be inconsistent with result 1, another case of legislated non-compliance. To achieve, monitor and measure this result costly and time consuming inventories will be required. If multiple licensees are operating in an area it will be virtually impossible. It is worse than the existing Code and a significant cost add-on.	COFI, Final Comments paper, June 28, 2002, p. 59
Result #5 Livestock that are used for site preparation or vegetation management must not adversely affect other forest values	This is a redundant result. It is not achievable at any a particular point in time. It may be in conflict with result 4, another case of legislated non-compliance.	COFI, Final Comments paper, June 28, 2002, p. 59
	note there is significant commentary on this issue included under Section 6.4 in the range management regime	gf
Rule #1 The licensee must submit a free-growing declaration and evidence of this statement to the District Manager	No provision is made for closure of liability.	COFI, Final Comments paper, June 28, 2002, p. 59
	Why is this required? It is assumed that forest cover information will be included as part of the RDP. In moving towards a result based system, this is the type of information that licensees should not submit, but should keep for auditing purposes. This is not decreasing the paperwork that is required today. It is recommended that FTG declaration be done by an RPF and be subject to audit by MoF.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	In practice, we do this already with ISIS, with a signed and sealed Form 'C' declaration. We do not submit any other evidence with this declaration, but	Pope & Talbot, Lyle LeClair, RPF, p. 1

	have the FTG survey on our files for MoF inspection. Submitting evidence is over and above what we're doing now under existing legislation and policy. RBC should be putting the emphasis on RPF signed and sealed ISIS declaration; not submitting additional "evidence" that bureaucrats can scrutinize.	
	There is a notable absence of rules related to non-timber values (with the exception of limited content on fertilizer use). With regard to fertilizers, application restrictions only apply in community watersheds ignoring other domestic use watersheds and fisheries values. Furthermore, the limit of 10,000 stems per hectare (max density) is so excessive as to be meaningless – trees 1 m apart. A lower limit on maximum density per block should be set (i.e. 5,000 stems per hectare). Free growing is not defined, and no details are specified for what free growing standards will be. We remain concerned that requirements around removing competing vegetations could create incentives for herbicide use that has potentially harmful environmental impacts.	WCEL, p. 38
Rule #2 Where forest health factors may affect the health of a required tree species, the licensee must use resistant seed sources, seedlings or vegetative propagules if they are available, and take any other actions necessary to ensure trees established for the purposes of a free-growing stand will remain healthy	This rule is redundant, as there is a forest health management regime already in the Code. It is not possible for licensees to ensure the result. If it stands, the rule may require licensees to carry out practices that are harmful to the long-term health of the forest. Scientific studies have shown that breeding for disease resistance is counterproductive in some cases. This rule may also limit site preparation options on some sites.	COFI, Final Comments paper, June 28, 2002, p. 60
	Which type of action will be required? It is implied in this statement that licenses are responsible to ensure the stand REMAINS healthy – does this mean after free growing? At what point do the obligations cease? Doest this mean practicing due diligence up to the point of reaching free growing? The wording on this section could have serious and costly implication depending on the interpretation. It is recommended that the licensee obligation automatically revert back to the Crown once free growing status has been	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4

	declared by an RPF. There should be no obligation for the licensee to maintain a health stand through to the next rotation. Any activities required post-free growing should fall under the jurisdiction of Forest Investment Account.	
	Should a person use seedlings that are resistant to forest health factors if they are not ecologically suitable to the site?	West Fraser, p. 3
	Potentially important and fully supportable, assuming that it does relate to wildlife and that the minimum objective, as per the goal statement above, is to sustain populations.	BC Trappers Association, p. 7
Rule #3 A person who carries out a silviculture treatment and uses fertilizer must store, handle and apply the fertilizer in a manner that protects forest resources. In a community watershed, fertilizer must not be applied closer than 100 m upslope of a water supply intake or within 10 m of a perennial stream	This result will be internally inconsistent on some sites; trade-offs must be made during the process of forest management. Another case of legislated non-compliance. This is worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 60
	The fertilizer rules are overly prescriptive and do not differentiate between broadcast and individual tree applications. The result should be that no fertilizer enters a perennial stream or that dissolved N levels at the intake don't exceed a specified health threshold with a built-in safety factor.	WFP, Summary of Operational Comments, p. 16
Rule #4 Prior to harvest, a licensee may submit a request for a variance to the free-growing standards where site specific conditions prevent the achievement of the standards	The ability to request a variance to the free growing standards post-harvest are just as necessary as pre-harvest. It is necessary to be able to amend free growing standards at any time in the face of new knowledge.	Dennis Farquharson, RPF, Tolko Industries, June 30, 2002
	The "prior to harvest" condition is too limiting. Suggest allowing variance if the reason for not attaining FTG could not have been reasonably foreseen. There should be more flexibility in the standards. e.g. for "blending" standards in transitional ecotype areas and for areas where regeneration was carried out in a timely manner, and there was no site damage, and all that is needed is more time for trees to reach target height.	WFP, Summary of Operational Comments, p. 15
	This rule is more restrictive than the existing Code, where variances may be requested after harvest. Generally, it is not clear how variances will be	COFI, Final Comments paper, June 28, 2002,

	handled in the absence of site plans. It appears that site plans may still be required to have variances approved. The paper does not consider other approaches that would begin with the assumption that site variability is to be expected and planned for. Providing for ad hoc, site-specific exceptions and variances from fixed rules and results is more complex and resource intensive that allow licensees to make proposals in their initial applications for approvals.	p. 60
Rule #5 The maximum density for any block will be 10,000 stems per hectare unless the regional manager approves a different standard considering ecological, social and environmental objectives	This standard is not based on any biological requirement and is not consistent with the findings of scientific studies. Legislation is not the appropriate place for maximum density standards. If a policy is required at all, its development and implementation would require the consideration of economic objectives to make it workable.	COFI, Final Comments paper, June 28, 2002, p. 60/61
	There is too much controversy over the maximum 10,000 stems per hectare as a Provincial standard. This number should be dropped from the RBC, and let the Regional Manger dictate what the max density should be on a regional and ecological basis. If 10,000 is to be retained, then additional clarification is required on what the countable height and post-spacing density should be. Currently in the Boundary Forest District, we are restricted to Target Spacing plus 600 stems/hectares. Therefore the maximum post-spacing stems/hectare is 1800sph. This target stocking still defies logic. 9,999 stems/hectare is good, but 10,001 stem/hectare is bad. More and more studies are showing that the 10,000 number is an arbitrary number and current data is showing that a higher density is possible with no negative side effects.	Pope & Talbot, Lyle LeClair, RPF, p. 1
	Maximum density should only apply to lodgepole pine stands subject to repression. Other stocking strategies should be up to the licensee and site specific depending on management objectives for each site unit or block, stand, strata or plot average? The smaller the unit the more onerous and costly to comply.	WFP, Summary of Operational Comments, p. 16

	Why has this been included? There is no evidence (at least on the Coast) that high density stands would stagnate if they are not spaced. There is considerable evidence that juvenile spacing provides no return on money invested. This requirement should be eliminated. Incentives to carry out commercial thinning should be investigated.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	Under maximum stocking density, the discretion accorded to the Regional Manager is important to us, since some of the small mammal species upon which some furbearers depend (e.g. snowshoe hares) will need special consideration in some areas.	BC Trappers Association, p. 7
Exemption #1 Licensees may choose to propose alternate stocking standards to be approved by government	mechanism to vary stocking standards on a site-specific basis must exist and must be stated prior to harvest.	Judy Thomas, RPF, June 30, 2002
	The items relating to the potential for alternate stocking standards do no explicitly include wildlife habitat needs as an operative rationale, and we believe that they should	BC Trappers Association, p. 7
	The rules regarding how stocking levels will be established are unclear. The information requirement should read that estimates are based on statistically sound survey methods.	Northwest Natural Resources Network, p. 22
	If a licensee chooses to utilize alternate stocking standards – at what stage is the approval for this variance sought (e.g. no amendments to RDP's)	West Fraser, p. 3
	This process and mechanism for providing exemptions should be made clear. Generally this ad hoc approach to variances and exemptions to hard wired results and rules is complex and requires more resources than allowing for licensees to make proposals in their initial application.	COFI, Final Comments paper, June 28, 2002, p. 61
Exemption #2 Where a treatment would be more appropriately carried out after the late free-growing date, the licensee may request	Limited liability of deferred treatments (spacing /brushing) should be permitted, but if the treatment is later not required (due to unexpected stand development, for example) then the liability should be eliminated. When the stand is successfully treated all liability is eliminated.	COFI, Final Comments paper, June 28, 2002, p. 61

approval to delay declaration of free growing where all other provisions of free growing have been met with the exception of the treatment. The licensee must prepare a rationale which will be available upon request but is limited to situations such as: • brushing of deciduous species where undertaking the treatment prior to free growing would result in a failure to achieve free growing; • reducing the density of trees where undertaking the treatment prior to free growing would result in poor crop tree selection; or • other similar rationale. Provided approval is granted, the liability of licensees will be limited to the successful completion of the treatment	Movement to a Results-Based Code provides a few "win-win" opportunities in which detailed and onerous prescriptive standards can be replaced, costs to licensees can be reduced, timber supply and AAC are maintained, and ecological values are enhanced. The standard approach to industrial forestry in B.C. can lead to a degradation of ecological values in forested landscapes primarily through a process of homogenization and simplification. Implementation of an agricultural model of forestry with an emphasis on full site occupancy and little tolerance for non-crop species has had severe impacts at the stand level on understory vegetation, and associated wildlife and other biodiversity. In the 1999/2000 fiscal year, it is estimated that $36 million was spent by licensees and the Ministry of Forests on brushing activities in B.C. in order to meet free-growing obligations. But recent research indicates that up to 50% of this expense may not be necessary, in that there is usually no effect on crop tree survival and often little or no effect on crop tree growth. Yet the brushing continues because a "free-growing" crop tree is defined by the abundance and stature of nearby brush, not whether or not its growth is meeting the potential of the site.	Northwest Natural Resources Network, p. 22
	If it is suggested that the licensee carry out a silviculture treatment more appropriately after free growing, why not go the other way? For example, it has been shown that fertilizing pre-free growing is one of the most beneficial times to treat, so why not allow FIA funding to apply to certain pre-free growing activities that would otherwise not be done?	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	The provision to allow delay of free growing declaration to allow proper treatment is a positive one. An exemption may also be needed to facilitate funding of incremental treatments that may best occur prior to free growing.	WFP, Summary of Operational Comments, p. 16
Information Requirements: The licensee must submit each year to the District Manager on or before May 31, a report describing the silviculture treatments completed in the area for the preceding year ending March 31 including:	What is the objective of reporting on land status and forest cover immediately post-harvest at age 5? It can be assumed it is NSR after harvesting, so why not receive this information when the stocking survey is done, usually between years 1 and 5 post-harvest. As long as the stocking status does not change after the stocking survey the next submission of data will be during the free growing declaration.	Dennis Farquharson, RPF, Tolko Industries, June 30, 2002

▪ a summary of the silviculture activities carried out by the licensee, including the regeneration method, year of establishment, estimated species composition at establishment, and estimated density at establishment. ▪ a summary of the stand tending activities carried out by the licensee. • land status and forest cover information including wildlife trees, and a map immediately post harvest, at age 5, and at free growing.	In the past we have provided species and quantity information at the time of planting. All the rest of this information is made available at the time of the free growing declaration. If we submit it at the time of planting, will we again need to submit it at the time of the free growing declaration? If we submit it at the time of planting what will be done with it between then and the date of the free growing declaration? If the new SPAR system were being developed a little differently all of this information would be entered there at the setting of the sowing request and only information associated with variances from the sowing request would need to be supplied	
	Requirements such as this are not eliminating the paperwork from what is required under the current Code. It sounds like this is the same thing as MLSIS. In a move towards a results based code, it is recommended that silviculture treatments and assessments be kept on file and traced by the licensee for auditing purposes.	Weyerhaeuser, Pt. McNeill Divisional comments, May 29, 2002, p. 4
	This is the requirement that licensees submit an Annual Report describing all silviculture treatments in the previous year. Licensees already submit all this information through ISIS and is retrievable through ISIS queries. Requiring licensees to submit information twice is redundant and is more workload than what we're doing under existing legislation. Drop this requirement. The same can be said for this entire section. All of this information is already passed on to the MoF through ISIS or information sharing protocols at the District-Licensee level and does not need to be legislated. To ask for this is over and above what we're doing and a download of Ministry time onto licensees. I assume that the Regen Delay date has been dropped, although this isn't clear in the Discussion Paper. This is a **positive** move as this was a pointless timeline. Drop the Early FTG date requirement on the SP and have only one FTG date requirement. This would eliminate a number of SP amendments.	Pope & Talbot, Lyle LeClair, RPF, p. 2

	When the block is FTG, we submit a FTG declaration to the MoF and they can audit us on that performance. Set a maximum time-line but eliminate the minimum FTG time-line so aggressive and innovative companies can quickly achieve FTG and reduce the associated liability.	
	C&E staff having to wait for 5 years before they can assess a site is inappropriate. Throughout B.C., plantation failures are a result of missing a treatment window (i.e. inappropriate delays). On brush-prone sites and on sites with certain forest health issues, inaction for five years will be far too long to guarantee an optimally growing stand and will adversely impact timber supply even if subsequent regeneration is achieved.	Northwest Natural Resources Network, p. 22
	Why not just report stocking when the block is planted, and when the block reaches free-growing? Why doe we have to report all silviculture activities accomplished over the previous year? If the new code is to focus on results then isn't this all that should be reported and not all the activities undertaken to accomplish that result.	West Fraser, Ripmeester/Witala, p. 3
	We question the annual reporting to the MoF on government's calendar which is different from most licensees. Reporting requirements, other than for "results" should be minimal. We don't see the purpose of supplying maps immediately post harvest, nor at age 5 if the Ministry is only interested in free-growing results, as should be the case.	WFP, Summary of Operational Comments, p. 15
	Annual updating of GIS systems, including forest cover and inventory info by polygon will capture all that is needed for MOF to manage its responsibilities. Site specific audit work should be driven from the annual updates and MOF can request site data for those openings to be audited at that time. Requesting a map at age 5 is a more onerous requirement than the existing Code, and a map will often not contain new information. Currently licensees submit maps when the forest cover has changed and we believe this is sufficient. There is no reason for this requirement, it is not related to any	COFI, Final Comments paper, June 28, 2002, p. 61/62

	government decision making need	
	The silviculture report is an extra requirement. Requiring land status and forest cover information including wildlife tyrees and post harvest map at the completion of harvest, age 5 and at free growing is repetitive. Having interim check points is not consistent with a results orient approach.	Federation of BC Woodlot Associations, p. 7
	Removing Regeneration Delay may create problems. By Free Growing time, a poor stocking problem is difficult to solve, requiring the expensive FRDA-type of backlog remedies. If we discover an area is unstocked as late as Free Growing the problems are huge. For example licensees may change ownership, yet who would be responsible? Within the last 20 years there certainly have been a few licensees, which have under-performed as regards stocking. A 15 year wait with no interim hurdle is too great a trust. Regen delay surveying requirements could be reduced however.	Judy Thomas, RPF, June 30, 2002
Note: Pesticide use is administered under the Pesticide Management Act.		
General Comments	Stating objectives established in law creates potential to inhibit innovation if some of the steps to meet free growing are legally established.	Peter Wright, June 28, 2002, p.2
	The Ministry of Forests should be allowed to enter and audit plantations at any time, & should be required (not permitted) to audit at 2 years and at free-growing. The regulatory process is insufficient to ensure that licensees to gain an adequate knowledge of the cutblock to be managed. Successful stand establishment and efficient management of silvicultural activities requires site level knowledge and ecosystem mapping of cutblocks to ensure ecologically adapted tree species are established and to prioritize and plan management activities to ensure that high brush hazard treatment units are scheduled for treatment and assessment.	Northwest Natural Resources Network, p. 21-22

	The regime features less flexibility, mores costly, and in some cases impossible to achieve or contradictory requirements and is not consistent with the discussions between industry and government over the past year about developing a results-based silviculture regime. This approach is completely contrary to the objectives of providing the industry "freedom to manage" in delivering of defined results and reducing industry costs.	COFI, Final Comments paper, June 28, 2002, p. 58
	Generally the information requirements are excessive. No attempt has been made to coordinate with Forest Investment Account Information and other planning processes that are underway.	p.61
	This section fails to encourage innovation or creativity which is needed to improve reforestation and silviculture practices.	Federation of BC Woodlot Associations, p. 7
	Overarching concern is that this section provides no direction about what silvicultural systems are permissible in what circumstances Results should include a requirement that silvicultural systems are chosen that will achieve objectives for biodiversity, stand structure and species composition (scientific objectives unconstrained by timber supply impact caps/targets) Specific rules and results for maintenance of stand structural attributes and species composition, as well as protections for non-timber values should be specified either here or elsewhere in the standards (e.g. canopy complexity, snags, etc. are not addressed anywhere) A result relating to sustaining plant community representation and tree species composition typical of the ecosystem at the landscape level (at the site series level) (result 4) is an excellent idea, but must not be overridden if lesser legal objectives are established.	WCEL, p. 38
	The text is ambiguous in relation to the responsibilities of licensees. Is a licensee responsible for a stand until free-growing (as at present), or does that responsibility now extend beyond free-growing? This is a critical area for a number of issues related to forest health and stand maintenance. For true	Dr. John Innes, UBC, June 30, 2002, p.6

	SFM, it is inappropriate for stands to be unmanaged between free-to-grow and harvesting. This not only creates forest health risks, but also prevents licensees from ensuring that the future timber supply from particular operating areas is protected. A major step towards SFM in BC would be to give licensees responsibility for all forest management in their operating areas. This in effect means a move towards area-based tenures, something that is required if SFM is to be practiced	

6.2.8 Gene Resources

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *The objective of results-based gene resource management is to retain sufficient genetic diversity essential to allow adaptation to environmental change and to avoid indiscriminate movement of seed and vegetative material resulting in poorly adapted regeneration*	Genetic resources are currently managed by the Forest Genetics Council through the Tree Improvement Program. The Council has both industry and government representatives. Individual licensees do not actively manage genetic resources. Therefore it is inappropriate to set goals for licensees for values that they do not control. If the Tree Improvement Program is downloaded to industry in the future, then the goal statement could be included under the silviculture management regime. The goal statement should also then be expanded to include increased growth and pathogen resistance	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
	Recommend addition of the concepts of increasing productivity and of landscape-level management. This could read as follows: *The objective of results-based gene resource management is to maintain sufficient genetic diversity, at the landscape level, essential to allow adaptation to environmental change, to maintain adaptation through knowledge-based movement of seed and vegetative material, and to enhance timber productivity through the use of select seed and vegetative materials*	Forest Genetics Council of BC, June 28
	Goal statement is a good start, but reflects only the bare minimum that would be acceptable, rather than what our long-term goal should be. In addition, the goal statement does not address the genetic diversity in relation to non-timber values. For example, breeding trees that are resistant to heart rot might be desirable for timber managers, but such trees would be missing an element highly valued by cavity nesting birds. This concern also arises in relation to the results regarding gene resources. Phrases like "best" and "acceptable" are highly subjective and unless requirements to protect non-timber values in particular ways are specified, such words are likely to be interpreted in relation to fibre production not in terms of ecological functions.	West Coast Environmental Law, p. 39

	Solution: Requirements related to addressing non-timber values in the goals, results and rules for gene resources must be specified.	
	These results and rules are far in excess of what is required to achieve good seed/gene management. They are confusing and appear to be contradictory. To the degree that we understand their intent, we believe they will increase costs and reduce industry flexibility. There is no need to have gene resources managed separately from the silviculture regime. The goal described above is not manageable or reasonable to apply to operations. Licensees can comply with requirements for collecting and using seed for growing stock but this regime appears to go far beyond this. Whatever regulation occurs should be designed to include cost benefit analysis of options and to vary according to the zone and priorities of the site.	COFI, Final Comments paper, June 28, 2002, p. 62
Result #1 *The licensee must sustain the productive capacity and value of timber and non-timber resources across the landscape through the use of best genetic material available at time of seedlot selection.*	Reference to "non-timber resources" is unclear. What non-timber resources will be impacted in a meaningful way by the use of selected genetic materials? Consider removing this phrase. FGC is in agreement with the reference to maintaining productive capacity through the use of the best genetic material available. A clear definition of "best genetic material" will be needed, however, existing experience in this matter, and existing MoF technical standards, make this feasible. Suggested wording: *The licensee must sustain the productive capacity and value of timber across the landscape through the use of the best genetic material available at the time of seedlot selection.*	Forest Genetics Council of BC, June 28
	This result requires that licensees sustain the productive capacity through the use of the best genetic material available. This result is in fact a rule. If it is the intent of government to require the use of improved seed then this requirement should be included under the Silviculture management regime as a rule. Similar language under the Forest Practices Code caused confusion as exemptions were given based on the increased cost of improved seed making	Vernon Seed Orchard Company Ltd, Tim Lee, June 28

	it "unavailable". There is also the issue of how much difference in genetic worth makes one seedlot better than another. Clear definitions around "best seed" are required. A better approach to this issue is to ensure that licensees have an incentive to use improved seed. This could be accomplished with a policy that assures volume-based licensees that plant improved seed receive a pro-rata share of any associated increase in harvest levels.	
	This is neither achievable, nor measurable. If it were achieved, the result could be in conflict with result 3, another case of legislated non-compliance. It may also not be the most economically efficient approach to achieving overall objectives. This is worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 63
	The concept of using the best genetic material and registering seedlots for non-timber (salal, cedar oil production, fungal inoculants, botanical products) resources is troubling. This rule would prevent boy scouts and school children from collecting a single seed and geminating it in a Styrofoam cup.	Western Forest Products, Summary of Operational Comments, p. 16
Result #2 *The licensee must ensure genetic diversity will be conserved such that genetic adaptation capability is maintained in response to environmental factors and forest management over time, including regeneration genetically adapted to the site*	The discussion paper contemplates administration of seed transfer guidelines as a "best practice", recognizing current field forester familiarity with the concepts and practices of seed transfer. This is further supported by both a substantial knowledge-base in the province and the direct integration of seed transfer information in seedlot ordering and management information systems. There is risk associated with relaxing a strict adherence to seed transfer guidelines, but within the context of professional accountability and the Results Based Code intent, this risk is probably acceptable Existing technical standards guiding seed transfer and genetic diversity (seedlot effective population size) are acceptable for commercial tree species, and are generally considered fundamental to maintaining the genetic resource. Genetic diversity and genetic adaptation for species other than commercial trees should be dealt with thorough biodiversity requirements, and should not be part of section 6.2.8.	Forest Genetics Council of BC, June 28
	This result is impossible to achieve or measure. This is worse than the	COFI, Final Comments

	existing Code.	paper, June 28, 2002, p. 63
	Result 2 states that licensees must sustain genetic diversity while Result 3 requires that licensees must manage gene resources such that they are conserved. The results appear to be very similar. As previously stated, it is the Tree Improvement Program that actively manages genetic resources. As individual licensees do not control the management of genetic resources, it is inappropriate to evaluate them against results 2 and 3. If the Tree Improvement Program becomes the responsibility of the licensees in the future, then a single result that genetic diversity be conserved could be added to the Silviculture management regime.	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
Result #3 *The licensee must manage gene resources such that acceptable levels of genetic diversity, within and among species, are conserved*	The statement "acceptable levels of genetic diversity" will be difficult to define. Standards will change by ecosystem, by objectives, and by opinion. This section should be more specific in reference to the maintenance of important gene resources of forest trees where such resources could be threatened. This must ultimately be measurable and have a defined result, with references to both the landscape and the stand levels included in technical standards. Suggested wording: *The licensee must manage the gene resources of native commercial tree species to conserve important or rare populations*	Forest Genetics Council of BC, June 28
	This is not achievable, measurable or even understandable. How can a licensee know what an "acceptable level of genetic diversity is"? This is worse than the existing Code.	COFI, Final Comments paper, June 28, 2002, p. 63
Rule #1 *The licensee must use only registered seed and vegetative lots for Crown land reforestation*		

Rule #2 *The licensee must keep a record of the registration numbers of the seed and vegetative lots used and the locations where they are planted*		
Rule #3 *A person involved in processing and/or disposition of cones, seeds and vegetative material collected from Crown land (or licensed orchards on private land) must be in possession of a Seed and Vegetative Material Dealers Licence.*	A seed dealers license is currently required. It is recommended that this requirement should not change, but if changes are contemplated then they should first be discussed with stakeholders	Forest Genetics Council of BC, June 28
Rule #4 *The licensee must deploy stand and landscape level seed and vegetative material according to the conditions of registration and land use objectives*	It is unclear what is meant by "landscape level seed". Stating that seed must be deployed according to land use objectives is a redundant. The objectives of approved land use plans will be requirements; there is no point in repeating that they must be followed.	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
Rule #5 *A person must not collect cones, seed or vegetative material unless in possession of a Cone, Seed and Vegetative Material Collection Permit.*	Licensees have reforestation obligations and should not be required to obtain a cone collection permit. Rules governing cone and seedlot registration should still apply. Suggested wording: *A person, except for a licensee within their operating area, must not collect cones, seeds or vegetative material unless in possession of a Cone, Seed and Vegetative Material Collection Permit.*	Forest Genetics Council of BC, June 28
Rule #6 *A licensee who is required to re-establish a stand of trees must store tree seed with the MOF*	Enshrines the Provincial Seed Centre. Licensees should be free to store in their own, a consortium, contractor of Provincial facility if the price and standards of care are right.	WFP, Summary of Operational Comments, p. 16

Statutory Power #1 *The Chief Forester, or a designated authority, will have the ability to prevent or limit the removal of cones, seed or vegetative material from British Columbia*	This must be interpreted in a way that will not limit cross-border trade in seed and vegetative materials, where such surplus materials exist and recognizing public investments in the development of such materials. An example could be the sale of surplus seedlings grown from an orchard seedlot to Alberta or Washington customers	Forest Genetics Council of BC, June 28
	This power would be more appropriately stated as a rule.	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
Statutory Power #2 *The Chief Forester, or a designated authority, will have authority to order licensees to implement appropriate gene resource management measures*	Relating to 2 and 3: The concept of authority to ensure landscape level (not just stand-level) gene resource management objectives and implementation has merit. However, there is concern that the broad powers listed could result in conflicts over interpretation. Focus should be only on commercial forest trees. The MoF, with it's stewardship mandate, will be challenged to identify landscape level gene resource values in a meaningful fashion. Requirements that may be placed on licensees must be well defined and measurable, such as gene conservation for agreed-upon priority species or stands, or possibly superior provenance protection.	Forest Genetics Council of BC, June 28
Statutory Power #3 *The Chief Forester, or a designated authority, will have the ability to specify identified gene resource management genotypes and require their storage with the MOF*	Statutory powers 2 and 3 are inappropriate given that individual licensees do not actively manage genetic resources. If the Tree Improvement Program were transferred to licensees, then a result specifying conservation of genetic diversity would be sufficient	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
Information Requirements: *The licensee must submit each year to the District Manager on or before May 31, a report describing the gene resource management activities completed in the area for the preceding year ending June 30*	This requirement appears to retain informational detail at the specific cut-block level. This is a higher resolution than that required for other silviculture activities. Seedlot use information is already available through the MOF Seed Planning and Registration System (SPAR) at a general level, however, it is recognized that access to spatially explicit seedlot deployment information is needed in the event of plantation failure or signs of	Forest Genetics Council of BC, June 28

including: - *a summary of the seed and vegetative lots used in reforestation activities carried out by the licensee, including the registered seed and vegetative lot identification numbers and quantities planted;* - *a summary of the planting location (SPZ, BEC, latitude, longitude and elevation range); and,* - *any other gene resource management information as required by the District Manager.*	maladaptation. Suggested wording: *The licensee must maintain, and submit to the District Manager on request, records on gene resource management activities completed in all areas, including:* - *Seed and vegetative lots used in reforestation activities carried out by the licensee, including the registered seed and vegetative lot identification numbers and quantities planted;* - *Records on the planting location (SPZ, BEC, latitude, longitude, and elevation range)* - *Any other gene resource management information as required by the District Manager*	
	Detailed reporting of management activities is unnecessary under a results-based legislative regime	Vernon Seed Orchard Company Ltd, Tim Lee, June 28
	The information requirements have a more onerous and less flexible tone than current procedures. It seems that major strides are made in streamlining in some areas, yet in other areas things become more onerous. It's almost as though the bureaucrats successful in creating a process under the previous government, have bee slapped down but those that didn't succeed last time are now getting their kick at it.	WFP, Summary of Operational Comments, p. 16/17
	Drop this requirement altogether. We already submit this information through the ISIS requirement and I see no reason to submit this information twice. The MoF can run their own ISIS query and come up with information themselves. There is no reason to download this administrative task to industry. RBC is supposed to save money. Plus the way they have this requirement written, the June 30th deadline of the preceding year is right in the middle of the planting program. The spring planting program ends in the middle of June, with the summer program starting right around the end of June, beginning of July. At the very least, have this date consistent with the 6.2.7 *Silviculture Information Requirement*	Pope & Talbot, Lyle LeClair, RPF, June 28, 2002, p. 2

	timeline	
	Why are we required to submit all this information to the MOF? We recommend that it all be kep6t on file with the licensee for auditing purposes. This is not cutting down on the paperwork that we are currently required to do. The requirement to store seed at the Seed Center is onerous and costly, it requires us to send surplus seed back after sowing from nurseries that are equipped to store seed on site. It also centralizes all the provincial seed at one site greatly increasing the risk to loss through fire, eco-terrorism, etc.	Weyerhaeuser, P.L. McNeill Woodlands, May 29, 2002
General Comments	Section 6.2.8 of the Discussion Paper is acceptable in general direction and intent and makes an important contribution by integrating gene resource management principles into forest management in British Columbia . There is concern that some paragraphs, as described in the discussion document, are generalized statements that will be subject to different interpretations and may be difficult to define for the purposes of actions on the ground. Council requests the opportunity to participate further in the development of the regulations and technical standards that will support this section of the new Code	Forest Genetics Council of BC, June 28
	It is unclear how the proposed results will be measured, and how licensees or others will be held accountable. Develop a gene conservation program outside the legislated code, using regulatory powers only to enforce critical rules relating to transportation of destruction of genetic material. The management and reporting should be part of "best practices".	Slocan Forest Products, June 11, 2002, p. 20
	There appears to be an inordinate amount of emphasis on the management of gene resources. If licensees were given a longer term vested interest in the lands they are managing utilizing the best seed / seedlings would not be a concern.	West Fraser Mills, Ripmeester/Witala, p. 3
	Eliminate the Gene Resources management regime and manage the	Vernon Seed Orchard

	utilization of best seed and conservation of genetic resources under the Silviculture management regime. A rule requiring that licensees use the best seed available, with clear definitions of what constitutes best seed, could be added to the silviculture management regime. However, it is preferable to meet this objective by ensuring volume-based licensees that plant improved seed receive a pro-rata share of any associated increases in harvest level. Under the current organization of the Tree Improvement Program it is inappropriate to set goals, results, rules and statutory powers for licensees to conserve genetic resources. If the program is downloaded to licensees in the future, then a result requiring the conservation of genetic resources could be added to the silviculture management regime. The rules for collecting, handling and storing seed could be included in the Silviculture management regime. The Statutory Powers and Information Requirements are not required	Company Ltd, Tim Lee, June 28
	These requirements seem way to general and far reaching, and appear to apply to all species, not just tree species used for reforestation. Suggest they make some rules that are far easier to interpret and follow for tree species. For non-tree species, drop entirely from this section (non-tree genetic diversity should be (and, we assume, has been) a consideration when setting rules, objectives, etc. for old growth reserve levels, wildlife tree conservation, etc.)	Western Forest Products, Summary of Operational Comments, p. 16

6.2.9 Soil Conservation

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *Forest harvesting, site preparation and range activities will protect soil properties, including the physical, chemical and biological attributes in addition to the natural drainage patterns of the site.*	goal statement not clear what it means to "protect" soil properties; no definition for "protection", "sensitive soils", "insufficient area... to warrant treatment", "unacceptable risk"	West Coast Environmental Law, page 39
Results: *Forest harvesting, site preparation and range activities will result in soil properties that will allow:* ▪ *establishment of a commercially valuable and ecologically suitable stand of trees and under-storey on the net area to be reforested at least equal in productivity to the stand that was harvested;* ▪ *avoidance of soil erosion; and,* *prevention of delivery of soil into streams and other water bodies.*	impossible to measure whether a stand of trees and understory is "equal in productivity." "avoidance of soil erosion" – difficult to measure this result "prevention of delivery of soil into streams" – virtually impossible for harvesting operations to prevent soil delivery. already covered in other regimes increase in the soil disturbance limits more restrictive than current Code, as there are other legitimate reasons – i.e. site preparation to achieve silviculture results; there are other specific operating area issues which warrant increased disturbance levels	COFI Comments paper, pp 65-70
	the results described in the soil conservation section again are very onerous and difficult to measure.	West Fraser Mills, Dave Ripmeester, RPF and Doug Witala, RPF, June 12, 2002
	"harvesting activities must result in soil properties that will allow avoidance of soil erosion and prevention of sedimentation" – unattainable. change to "harvesting activities must minimize present and future soil erosion and sedimentation" results –"avoidance of soil erosion and prevention of deliver of soil into.." why use "avoidance" and "prevention"? is the differentiation purposeful?	Western Forest Products Ltd, Summary of Operational Comments, page 17, June 25th, 2002

	statement "will result in soil properties that will allow… prevention of deliver of soil into streams" – wording is so convoluted that the intent is unclear; does it mean activities will cause no soil to be introduced into streams? soil enters streams naturally and as a result of logging. how will these be separated?	Giles, Hudson, Millard, Schwab, Teti, Wilford, Winkler joint submission, June 29th, 2002
	does prevention of delivery of soil into streams and other water bodies mean all soil? unachievable if this is the case	West Fraser Mills, D. Ripmeester, RPF and D. Witala, RPF, June 12, 2002
Rule #1 *Following the completion of harvesting and site preparation operations, and rehabilitation, soil disturbance must not exceed the following proportions of the net area to be reforested:* *a. 5% per ha for sensitive soils* *b. 10% per ha for all other soils* *In areas where silviculture systems will require multiple harvesting entries within a rotation, the limits are:* *a. 10% per ha for sensitive soils* *b. 15% per ha for all other soils*	thresholds for soil disturbance could be lower and still operationally feasible; concern on non-inclusion of parallel roads to blocks	West Coast Environmental Law, page 39
	"soil disturbance must not exceed the following…" rules more restrictive than the current Code… no latitude for professional judgment or site specific approaches is permitted… measurement of soil disturbance is difficult, inefficient and costly… focus should be on rehabilitation, site preparation and regeneration opportunities to measure against achievement results regime needs to recognize where site preparation is required to improve site productivity, or ensure survival of the stand, soil disturbance limits may be exceeded. current Code has provision for roadside work areas. disturbance targets should be set on-site by professionals, not through legislation "per hectare soil disturbance" applying to areas 1 ha and larger – rule not required if results based on landscape level objectives	COFI Comments paper, pp 65-70
	Rule 1 sets disturbance objectives by ha; practice should continue where disturbance is measured by standard unit	Wes Bieber, RPF, page 3
	definition of sensitive soil needs to be defined – prone to compaction, mass wasting, or some other disturbance causing loss of productivity	S. Higman, MSc, PEng, PGeo, Weyerhaeuser, June

		28, 2002
	soil conservation standard of 10% is excessive – should be less than 5% on all soils with rehabilitation requirements if exceeding. current monitoring of soil disturbance is inadequate and will likely decrease further with government cutbacks	Northwest Natural Resources Network, June 12, 2002
	no evidence of adverse site productivity effects of soil disturbance over 5 or 10% having blanket rules such as soil disturbance limits is not necessarily the best way to achieve full site productivity. the prescribing forester should be allowed the flexibility to prescribe what they feel is the best way to achieve maximum site productivity on a site-specific basis	Weyerhaeuser North Island group, May 29, 2002
	can soil disturbance limits be exceeded for mechanical site preparation treatments? where are sensitive soils defined – if it is in the context of the guidebook then isn't the guidebook legally binding?	West Fraser Mills, Dave Ripmeester, RPF and Doug Witala, RPF, June 12, 2002
	where are sensitive soils defined – if it is in the context of the guidebook then isn't the guidebook legally binding?	West Fraser Mills, Dave Ripmeester, RPF and Doug Witala, RPF, June 12, 2002
	Rule 1 very prescriptive, arbitrary, and counter to the spirit and intent of RBC; disturbance is equated with degradation – disturbance can be good (SCHIRP research) as long as detrimental erosion or compaction is prevented.	Western Forest Products Ltd, Summary of Operational Comments, page 17, June 25th, 2002

Rule #2 *The level of soil disturbance can temporarily exceed the limits in rule #1 to construct temporary access structures, if these structures and the soil conditions on these sites are suitable for rehabilitation, such that the total soil disturbance levels that can occur during operations are as follows:* a. *10% per ha for sensitive soils* b. *15% per ha for other soils* *These additional temporary access structures must be rehabilitated within one year of the completion of harvesting operations such that the total soil disturbance limits do not exceed the limits specified in rule #1.*	rehabilitation within one year is not reasonable in some circumstances, i.e. where temporary access structures are needed for silviculture; rule redundant if licensees managing to results. reforestation timing requirements already covered off by result #1 in silviculture regime	COFI Comments paper, pp 65-70
	Rule 2 sets out one year period for rehabilitation activities – sooner than the 3 years commonly used now, and contradicts the 5 years road standard used to reduce road impacts on landscape	Wes Bieber, RPF, page 3
	regarding rehabilitation of roads and trails – The trappers prefer that the trails be seeded but not rolled back.	Ft. Nelson Trappers Assoc, May 16, 2002
	example objectives: thou shalt not damage the soil to the point where a reasonable and knowledgeable person would consider you a savage. if you compact a block sufficiently so as to affect tree growth, the you shall decompact that block in the best way you can think of.	Pope & Talbot, Doug Noren, RPF, June 28, 2002
	Rule 2 sets time limit for rehabilitation within NAR to one year, currently 2 years, effectively reducing the flexibility of scheduling rehabilitation activities.	WFP Ltd, Summary of Operational Comments, p. 17, June 25th, 2002
Rule #3 *Per-hectare soil disturbance will apply to any portion of the net area to be reforested that has an area of 1 ha or larger, and* a. *a minimum width of either 100 m; or,* b. *the width of the standards unit, if the standards unit is less than 100 m wide.*	Rule 3 problematic in isolated incidences – 4m wide backspar trail in block corner would occupy 7.8% of 1 ha square	WFP Ltd, Summary of Operational Comments, page 17, June 25th, 2002
	not always feasible/desirable to have the soil disturbance evenly distributed throughout the block	Weyerhaeuser North Island group, May 29, 2002

Rule #4 *An increase to the soil disturbance limits in rules #1 and #2 above may occur to the minimum extent necessary to accommodate:* a. *previous harvesting damage, including trails that are unusable or the following operations and treatments, if site productivity and surface and subsurface drainage of the site can be maintained:* ▪ *stumping operations;* ▪ *mechanized vegetation control treatments required for backlog reforestation, salal-dominated ecosystems or establishment of a commercial broadleaf species;* ▪ *salvage of windthrow; and,* ▪ *other similar operations.*	site preparation sometimes desirable to maximize the productive capacity of the land	Weyerhaeuser North Island group, May 29, 2002
	incorporated a multitude of guidebook items into legislation – going the wrong way; cannot put an objective on every single action in the woods; should be able to use professional judgment.	Pope & Talbot, Doug Noren, RPF, June 28, 2002
	Rule 4 faulty in assumption disturbance is bad	WFP Ltd, Summary of Operational Comments, page 17, June 25th, 2002
Rule #5 *Despite rule #1 above, and any limit under rule #4, the following areas of soil disturbance must be rehabilitated, or in the case of subsection (a) must have natural drainage patterns re-established, within one year after the completion of harvesting operations:* a. *an area of soil disturbance that may concentrate or channel surface and subsurface water in such a way that it is likely to cause sedimentation or diversion of water onto sensitive terrain;* b. *any road or landing that is a temporary access structure; and,* c. *an excavated or bladed trail, unless the trail is required for silviculture systems that require multiple harvesting entries, or all the following apply:* i. *the area occupied by all excavated or bladed trails amounts to*	"re-establish natural drainage patterns within one year" – requirement worse than current Code and will add costs; should focus on harmful changes only	COFI Comments paper, pp 65-70

less than 1% of the net area to be reforested; *ii. the excavated or bladed trail is less than 30 m in length; and,* *iii. natural surface drainage is not impeded by the excavated or bladed trail.*		
Rule #6 *A person must not construct an excavated or bladed trail on an area that is within a community watershed if the properties of the soil make it highly susceptible to erosion, and there is a likelihood that sediment will enter streams.*	apply Rule #6 more broadly than in community watersheds; remove exemptions in rules #8 and 9 given high thresholds	West Coast Environmental Law, page 39
	on "must not construct" excavated or bladed trails in a community watershed on erodable soils where sediment likely to enter streams – rule significantly increases costs and decreases access to timber; even natural systems introduce various levels of sediment; rule redundant, as result for Community Watersheds will drive practices.	COFI Comments paper, pp 65-70
	Rule 6 wording implies "any" likelihood is not allowable – world doesn't work that way	WFP Ltd, Summary of Operational Comments, page 17, June 25th, 2002
Rule #7 *A person, other than a holder of a woodlot licence, must ensure that the area of a cut-block that is occupied by permanent access structures, other than permanent*	Rule 7 and exemption 8 are prescriptive – replace with block aggregate limit instead of for individual cutblocks. permanent access structures don't exceed 7% - of what? TAUP, Net or Total harvest area, including or excluding reserves? what is a "permanent" trail?	WFP Ltd, Summary of Operational Comments, page 17, June 25th, 2002

trails, does not exceed 7% in total.	alter rule 7 such that the area occupied by permanent access structures is measured on a landscape (perhaps by licensee), allowing more flexibility in access management for licensees based on block size and terrain limitations. of note, licensees strive to minimize road construction costs, also helping to minimize % disturbance in permanent access structures	Weyerhaeuser North Island group, May 29, 2002
	on permanent access structures must not exceed 7% - rule will disadvantage operators who design small blocks in order to achieve other objectives; no reason for rule to be different for woodlots	COFI Comments paper, pp 65-70
Rule #8 *A person may increase the limit in subsection 7 to the minimum extent necessary to accommodate more road or landing area if:* ▪ *the cut-block is less than 10 ha;* ▪ *the cut-block has topography and engineering constraints which limit options for road location and development;* ▪ *the cut-block straddles access structures which pre-existed the cut-block; or* ▪ *other similar reasons exist.*	redundant in a results-based regime	COFI Comments paper, pp 65-70
	incorporated a multitude of guidebook items into legislation – going the wrong way; cannot put an objective on every single action in the woods; should be able to use professional judgment.	Pope & Talbot, Doug Noren, RPF, June 28, 2002
Rule #9 *A forest officer may exempt a person who carries out timber harvesting from rehabilitation requirements, if the forest officer is satisfied that:* ▪ *there is insufficient area affected or occupied to warrant treatment;* ▪ *treating the area affected or occupied is unlikely to restore soil productivity, or* ▪ *treating the area affected or occupied will create an unacceptable risk of further damage or harm to or impairment of forest resource values.*	S.9, exemptions more complex and resource intensive – allow licensees to develop soil disturbance proposals based on site circumstances and rely on professional judgment	COFI Comments paper, pp 65-70

Information Requirement: *A map of any area within the net area to be reforested that contains:* - *sensitive soils or* - *an area where a person has increased the maximum soil disturbance limit in accordance with rule #4, with the reason and the limit stated.* *If a person has increased the maximum limit for permanent access structures in accordance with rule #7, they must state the reason and what the limit is.*	new requirement for a sensitive soils map – new, different than terrain stability mapping? to what standards?	S.Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002
	how will "sensitive soils" be defined, identified, and at what map scale?	WFP Ltd, Summary of Operational Comments, p. 17, June 25th, 2002
	information requirement (map) puts new cost burden on industry; the requirement, by targeting sensitive soils, introduces a bias into the sampling and audit process; consider option of allowing licensees to keep information available for government to view "If a person has increased the maximum..." unclear if this is an exemption, or what mechanism and authority is responsible for this information requirement; no need if licensee given the freedom to manage to a result	COFI Comments paper, pp 65-70
General Comments	regime duplicates results and rules in silviculture, roads and riparian regimes prescriptive, often impossible to follow, and contrary to notion of providing licensees the freedom to manage range uses may result in compaction from cattle movement, beyond the control of forest licensees	COFI Comments paper, pp 65-70
	rules specified under this section are not necessarily the best process to reach the outlined result. If the desired result is interpreted as reaching free growing status without decreasing the productive capacity of the site and causing undue soil erosion, many of these rules should be eliminated.	Weyerhaeuser North Island group, May 29, 2002
	should be monitored on an ongoing basis by the MoF and periodically by the external auditors who provided forest certification. unresolved conflict not resolved at the local level can be moved to a higher level, but the vast majority of details would be resolved easily and immediately.	Pope & Talbot, Doug Noren, RPF June 28, 2002
	forest harvesting and site prep on same area as range activities, but only forest licensee has responsibility for establishing and growing future timber crop – long standing battle on the effects	Pope & Talbot, Randy Waterous

	of range activities on productive regeneration of timber crops entire section on rules is prescriptive – not results based – and allows no room for innovation or creativity with the focus entirely on the end result	June 28, 2002
	clear avenue for operational people to provide feedback on RBC once it's implemented. suggest website like Discussion Forum with RBC	WFP Ltd, p. 17, June 25th, 2002

6.2.10 Terrain Hazard Management

Results Based Code	Summary of Submission	Stakeholder
Goal Statement: *Forest development will be conducted in a way that will not cause landslides, adverse gully processes and snow avalanches that place human life at risk, and that can damage public and private property and forest resources, including water quality in community watersheds*	wording suggests to comply with this statement, on the west coast, it would require exclusion from harvest very large areas of merchantable forest. currently manage the risk with terrain overview and stability field assessments – professional recommendations are followed. risk and consequence always considered.	Interfor, A User Perspective, Bob Craven, RPF, June 2002
	delete rest of the goal statement after "snow avalanches"	West Coast Environmental Law, June 2002
	risk is not addressed appropriately in this regime. must be clear differentiation between a minor event, affecting a few trees and no other resources, and an event that causes significant property damage or loss of human life regime needs to recognize that landslides occur naturally, absent of any human influence concern that draft wording would find licensees liable for consequential results, even if the event would have occurred absent any logging many results already addressed in other regimes – more streamlining possible	COFI, Comments on the RBC, June 28, 2002, pp 70-72
Cross-reference: *See RDP Approval Test #4 under Section 5.3. The location of proposed forest development units in the RDP will tested relative to terrain hazards in community watershed or watersheds that have significant downstream fisheries values.*	reference to "...significant downstream fish values..." – concept should be changed as the federal *Fisheries Act* does not contemplate "significant" and requires protection be provided to all fish bearing streams and to an non-fish bearing water bodies that flow into fish habitat contributing to a fishery. suggest " ... community watersheds or watersheds with either fish habitat on-site or have downstream fisheries values..."	D.C. Morrison, June 28, 2002

Result: *Forest and range practices will not cause or create conditions that will result in landslides, adverse gully processes, snow avalanches or destabilization of alluvial fans where those events may:* *(a) place human life or safety at risk;* *(b) damage public or private property including land, buildings, roads, bridges, utilities and other structures;* *© damage timber plantations;* *(d) damage drinking water quality, water supply intakes, or water supply infrastructure, or reduce water quantity; or* *(e) result, either directly or indirectly, in harmful introduction of sediment to fish habitat.*	landslides are naturally occurring event resulting from geologic or climatic processes... even if a licensee conducts planning and harvesting in a diligent fashion, landslides will still occur. reword to "Licensees must make reasonable efforts to avoid creating situations which may lead to landslides."	WFP, Summary of Operational Comments, pp. 17, 18
	in the result statement, replace phrasing with "will increase the likelihood of landslide risk to moderate or above (as determined by a qualified professional), or will increase the likelihood at all if natural conditions would involve a moderate likelihood of landslides, etc."	West Coast Environmental Law, June 2002
	stated as an absolute and therefore impossible to achieve or measure. does not consider how to provide operational flexibility by zone or hazard class.	COFI, Comments on the RBC, June 28, 2002, pp 70-72
	Does this entail managing for zero risk in terms of landslides? Presently a low landslide rating in a TSFA dictates that no special measures for management may be necessary however there still exists a 0-10% chance of a landslide occurring	West Fraser Mills, D.Ripmeester, RPF and D. Witala, RPF June 12, 2002
	framework for this section is weak and incomplete, limiting terrain hazard management requirements to only those areas where human values may be impacted. specific list in result is limited to impacts on humans or human values, implying impact on an old growth reserve would be acceptable. language "will result in" requires expert evidence in enforcement action to prove not just that a landslide is likely to occur, but that it actually "will". huge barrier to successful enforcement.	West Coast Environmental Law, June 2002
	the phrase "or create conditions that will result in" is confusing the list (a) through (e) of negative outcomes is joined with "or", implying forest practices will not cause any of those things, however, the introductory sentence is not sufficiently clear to be sure that this is the intent.	Tim Giles, et al, research hydrologists and terrain specialists of the regional MOF

	wording of this section is not consistent with that in the goal statement	research divisions
	the FPC manages risk of landslides occurring which, in my opinion, is all that a forester or engineer can do.	Wes Bieber, RPF, June 15, 2002
	landslide occurrence is a probabilistic process. Forest practices can be developed that minimize the occurrence of landslides but not prevent them. the term "landslide" is not defined. under the current Code is a slope failure measuring $>500m^2$. most would assume this definition would carry over, but needs to be clearly stated consequences listed in (a) to (e) do not allow for taking a risk-based approach to landslide management. that landslide cannot damage timber plantations implies forest companies must avoid all terrain that could potentially initiate a landslide, netting our 216 000 ha of Weyco's currently operable forest, tying up 153 million m^3; significantly reducing the AAC. significant repercussions for BC the term "cause" has legal implications. determining cause can be difficult, time consuming and costly, potentially tying up many resources in legal proceedings to determine cause and fault with no change to the desired outcome term adverse gully process is vague, assuming reference to sidewall failure, debris flow or debris flood, but needs to be explicitly defined or substituted with specific terms for the gully processes in mind to be able to risk manage, a scheme that recognizes the hazard of probabilistic events: (high) >10 landslides per 100 ha logged over a 10 year period to (low) <1 landslide per 100 ha logged over a 10 year period.	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002

Rules:		
1. *A person whose forest practices cause landslides, adverse gully processes of snow avalanches, or destabilize an alluvial fan must promptly report any such events, and must carry out an emergency measures that are necessary to prevent or mitigate further damage if an emergency situation is considered to exist such that there is likely to be a loss of life or property or significant environmental damage.*	absolute liability for slides is worrisome as natural processes complicate analysis	WFP, Summary of Operational Comments, pp.17,18
	inconsistent with draft legislation in App 3; does not refer to watersheds with moderate likelihood of landslides	COFI, Comments on the RBC, June 28, 2002, pp 70-72
	the rules are prescriptive. the results seem to indicate that risks will be managed to zero or lower. put some confidence in the professionals developing the plans and they will creatively achieve the desired result, but the way it is currently worded, there is no flexibility	Pope & Talbot, Randy Waterous, June 28th, 2002
	Rule 1 results referred to are too serious to restrict rules about licensee behaviour to simply reporting such events after they happen, and (on one reading) only if the licensee is willing to admit they caused the event. a requirement to carry out actions to prevent or mitigate only applies in extreme circumstances, is undefined, and no action is required to protect environmental values generally	West Coast Environmental Law June 2002
2. *A person Must not clear cut in a community watershed if there is a moderate or high likelihood of landslides with a high risk of landslide debris entering directly into streams, unless exempted by the District Manager.*	Rules 2 and 3 overlap – Rule 3 may prevent the exercise of an approval consistent with Rule 2.	COFI, Comments on the RBC, June 28, 2002, pp 70-72
	Rules 2 and 3 are contradictory in that 2nd rule would allow variable retention silviculture system and 3rd rule is too restrictive regarding single stem opportunities	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002
	Rules 2 and 3 inconsistent	West Coast Environmental Law,

		June 2002
3. A person must not harvest in an area within a community watershed if the area is subject to a high or very high likelihood of landslides	Rules 2 and 3 contradict – 2 says must not clearcut in a community watershed if high likelihood of landslides; 3 says must not harvest in a community watershed if high likelihood of landslides – either remove "high" from rule 3 or 2 and include a provision under 3 to allow for single stem harvesting [or alternative harvest systems – gf]	Weyerhaeuser, North Island group, May 29, 2002
	use of the term Very High Likelihood of Landslides is inconsistent with current mapping standards that define Low, Moderate and High potential for post-harvest slope failure.	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002
Statutory Power: *An official will be empowered to order a licensee to do certain things if there are observations of harvesting or road construction activities on or adjacent to areas with terrain hazards that represent a potential threat to public safety, property or other values as specified in the result.*	statutory power listed is good, although ministry cutbacks raise concerns and "to do certain things" is vague. statutory power does not appear to be included in the draft legislative example provided statutory powers should be better defined, and include, for example, the issuance of stop work orders, and a role for citizen monitoring should be enshrined in the framework.	West Coast Environmental Law, June 2002
Sidebar comment: *A person whose forest practices cause landslides, adverse gully processes or snow avalanches, or destabilize an alluvial fan must promptly report this and carry out necessary emergency measures.*	avalanches are a result of weather and topography and are likely to occur on slopes >58%. to prevent destabilization of a naturally unstable feature such as an alluvial fan makes no sense at all section needs to be reconsidered	Wes Bieber, RPF, June 15, 2002
	snow avalanche management new in the RBC, needing more explanation and clarity	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002

General Comments	related assessments must be required and publicly available before logging approved. a standardized process and format for such assessments, including standardized hazard ratings, would help ensure the of quality assessments, provide cost savings to industry and consistency in the products produced by consultants require proactive assessments, and if not, then rules should be developed to avoid environmental risks.	West Coast Environmental Law, June 2002
	do not support broad, unspecified statutory powers of intervention when no contravention has occurred.	COFI, Comments on the RBC, June 28, 2002, pp 70-72
Appendix 3 Draft of Legislation for the Terrain Management Regime	draft legislation inconsistent with this section	COFI, Comments on the RBC, June 28, 2002, pp 70-72

6.2.11 Community Watersheds and Watersheds with Significant Downstream Fisheries Values

Results Based Code	Summary of Submission	Stakeholder
Goal Statement Forest and range activities will conserve fish, fish habitat, water quality, quantity and timing of flow in community watersheds and watersheds that have significant downstream fisheries values. These practices will protect channel integrity, will meet objectives for water quality, quantity, timing of flow, and will ensure that forest and range activities do not impair a purveyor's ability to provide potable water.	The cumulative hydrological effect of logging is covered through the RDP test in regard to these selected watersheds, but which is not addressed in any result in relation to other watersheds. little true additional protection seems to be provided to these important watersheds	West Coast Environmental Law, June 2002, pp. 41-42
	The choices of words in the goal statement are problematic – "will conserve fish habitat", "will protect stream integrity", and "meet objectives for water…". At best forest practices may avoid negative effects on fish habitat and water quality. "Conserving" and "protecting" habitat and water quality are not suitable words to apply to industrial forest practices.	Giles, et al, June 29, 2002
	Who determines what is a significant fish population? is an isolated, indigenous population of dolly varden char deemed to bed significant or does the paper only mean commercially valued (fish) statement should say "fish bearing waters" with no reference to "significant"	Jim Culp, June 29, 2002
	This results and rules regime is worse for the industry than the existing requirements for "watersheds with significant downstream fisheries values". There are no criteria specified for how these watersheds will be designated or how socio- economic priorities will be taken into account. The goal statement assumes that forest management activities can take place without having any impact on the natural environment. This is not possible, not even natural systems conserve channel integrity, however it may be defined. Nor is it possible to quantify or measure these results. Licensees have less certainty and more restrictions than under the existing Code, costs will increase and access to timber will decrease.	COFI Final Comments paper, p.73
	Title should be simply "Watersheds" – all watersheds must be treated with respect and not only those that are highly valued monetarily. all watersheds	West Kootenay Naturalist's Association,

	have endangered species such as bull trout, tailed frogs, etc. it is a lot more cost effective to protect a watershed than to reclaim it after it has been damaged In the goal statement, should change last sentence to read "... and will ensure that forest and range activities do not impair water users right to potable water" as 'purveyor' implies 'water distributor'. all users should have this right	Ed Beynon, June 28, 2002
	It's important to ensure good coordination between agencies and land managers with respect to he designation of community watersheds and watersheds with significant downstream fisheries values. All parties, including the DM and proponents, will need to have a consistent understanding of the required standards for identifying hazards and assessing cumulative impacts	Graham Wilkinson, Forest Practices Board Tasmania, June 30, 2002
Result Forest and range practices will be conducted in a manner that will: ▪ not introduce deleterious substances to streams; ▪ meet community watershed objectives at the water supply intake; ▪ maintain water quality, water quantity and timing of flow within the range of natural variability; ▪ protect channel integrity; and, ▪ maintain natural drainage patterns.	It is positive that many of the results for community watersheds and watersheds with significant downstream fisheries values are also required in the proposed framework for riparian management The riparian management results do not provide for maintenance of either water quantity or timing of flow, omissions which should be corrected Results under this section add little to the protection of either type of watershed, while the "rule" allows the licensee to develop its own rules (albeit which are subject to sign-off as part of the RDP).	West Coast Environmental Law, June 2002, pp. 41-42
	Establishing the range of natural variability would require years of expensive baseline data and data collection along with raising methodology issues. Protect channel integrity and maintain natural drainage patterns seem like goals rather than measurable results. Maintaining ...within the natural range of variability... would require a baseline for the range of natural variability. To be able to capture the full range of natural variability in the baseline, we would have to monitor a watershed for many years. The range of natural variability will likely have a	Western Forest Products, Summary of Operational Comments, p. 18

	great amplitude.	
	Result, bullet 3 – not clear how "maintain water quality, water quantity and timing of flow within the range of natural variability" is to be measured Many issues in baseline measurement, over what timeframe, what are the relevant parameters, and with what would the parameters be compared	Shelley Higman, MSc, PEng, PGeo, Weyerhaeuser, June 28, 2002
	This is redundant. The requirement is already covered by Federal Fisheries Act. This is an example of overlapping jurisdictions leading to complexity that has not been adequately addressed by the paper. Impossible to quantify, achieve and measure. It appears that operational feasibility has not been taken into account in developing this result. It is worse than the existing Code.	COFI Final Comments paper, p.73
	Clarity required – does "deleterious substance" include – soil used to backfill culvert installations, fine leaf and litter fall, large woody debris, bovine feces?	Randy Waterhous, Pope & Talbot, June 28, 2002
	The result that forest practices will "not introduce deleterious substances to streams." is suitably clear and strong for high value watersheds – supercedes the second bullet and the water quality aspect of the third bullet. This is the kind of "result" that is enforceable as it does not require any quantitative test. This strong and clear wording should be retained for high value watersheds.	Giles, et al, June 29, 2002
	Difficult if not impossible to determine whether "results" related to hydrology, water quality and hydroriparian habitat were or were not achieved Problems in (1) specifying environmental attribute such as water quality; (2) specifying the "natural range of variability" of an attribute in any specific case may be practically impossible; (3) determining whether forest development has pushed conditions outside that range may be impossible in most cases; and (4) maintaining conditions within a natural range is a necessary, but not sufficient, criterion for protecting against adverse impacts... therefore highly unlikely that a licensee could ever be proven not to have achieved the	R.D. Moore, PhD, PGeo, June 28, 2002

	specified results that would stand up to scientific and/or legal scrutiny. Provides detailed discussion on the metrics, natural range of variability, detecting change, and natural variability as a criterion. Key terms need definition: "natural range of variability" and metrics around quantifying attributes; "land use zones" ; "products" which seems to be a composite of 'targets' such as availability of timber and water quality objectives, and 'location and/or boundaries of features' such as access and treatments for wildlife habitat; "water quality"; "channel integrity"; "expected flow"; "significant fisheries values"; Difficult to detect negative impacts due to time lag in system response, the further one travels downstream from the site of forest development	
Rule Licensees must comply with specifications to achieve objectives that are described in a table that a licensee appends to the RDP. See description of Test #4 in Section 5.3	It is not clear what objectives are referred to, although the Discussion Paper refers the reader to the description of Test #4 in section 5.3. That reference suggests that the objectives relate to appropriate siting of development units relative to terrain hazards and hydrological effects, although the word "objective" is not used in that section.	West Coast Environmental Law, June 2002, pp. 41-42
	This will likely contribute significantly to RDP evidentiary burden. No information is provided on what is required or how the decision maker can consider socio-economic implications of alternate approaches.	COFI Final Comments paper, p.73
Cross Reference: See RDP Approval Test #4 under Section 5.3. ▪ Prior to issuing an RDP that encompasses a community watershed or watersheds that have significant downstream fisheries values, the District Manager must be satisfied that the licensee has identified terrain hazards in the watershed, and properly located forest development units relative to these hazards. ▪ In addition, the District Manager must be	This implies that the DM will be reviewing and judging the work of a professional. The stated result is impossible to achieve, no professional will be able to guarantee it. This will contribute significantly to the evidentiary burden. Depending on how the rights of licensed domestic water users are interpreted, this test has the potential to have a significant negative impact on industry operations, costs and timber supply.	COFI Final Comments paper, p.73
	If the watershed is in a degraded state... This implies that a licensee may have to carry out restoration activities in order to gain access to a watershed which implies significantly added costs.	Western Forest Products, Summary of Operational Comments,

satisfied that the licensee has identified cumulative hydrological impacts and hazards in the watershed, and has proposed forest development units that will not result in further impacts nor increase risk to channel integrity, water quality, water quantity, or timing of flow. ▪ If the watershed is in a degraded state, the licensee's activities will contribute to restoration of the watershed. ▪ RDP Test #1 protects the rights of licensed domestic water users.		p. 18
Note: ▪ Community watersheds will be designated by MSRM. ▪ The Regional Manager, Environmental Stewardship (WLAP) will designate watersheds with significant downstream fisheries values	In the Note section, the 2nd bullet puts the Regional Manager, WLAP, in conflict with the Fisheries Act, as he/she will be asking for some fish habitat to be treated more carefully than others. the *Fisheries Act* requires that it all be protected equally.	D.C. Morrison, June 28, 2002
	Community Watersheds designated by MSRM while WLAP designates watersheds with significant downstream values. Will this be an empirical or a political process?	WFP, Summary of Operational Comments, p. 18
	If this model contemplates additional designation of community watersheds, licensees must have opportunity to be involved. This is redundant. Designation of watersheds on basis of significant downstream values as fish, fish habitat and fish passage objectives are already provided for elsewhere.	COFI Final Comments paper, p.73
General Comments	This is not protection equivalent to the results and rules contained under the current Code. Currently extensive planning before logging can occur in a community, and decisions are made on the basis of recommendations from a hydrologist. Removing the planning but putting no meaningful results and rules in its place does not qualify as either a Results-Based Code or	West Coast Environmental Law, June 2002, pp. 41-42

	equivalent protection. The purpose of having a special status for watersheds of these types is because values must be protected before the damage occurs. It is especially important to use a precautionary approach to logging operations in these areas. The presumption should be against any logging in community watersheds, unless the evidentiary basis provided demonstrates that the results will be met, and Clearcutting should be prohibited. An additional RDP test should require water users' sign-off on any development units that contain or affect community watersheds. Some aspects of this proposal are provided for under terrain hazard management - p. 33 of the Discussion Paper, Rule should be modified: to provide equivalent protection to watersheds with downstream fisheries values; □to expand the prohibition to all such situations in these watersheds, and not merely where there is a high risk of landslide debris entering directly into streams. Landslides in such watersheds should be avoided at all costs; and □to remove the District Manager's exemption powers. why the current wording would allow the District Manager to authorize a Would a DM approve a clearcut in a community watershed knowing that there is a high or even moderate likelihood of a landslide devastating water quality in that watershed? A rationale in the use of this discretion should be required, and access to the discretion strictly limited. Similar rules could be proposed, adapted from our suggestions for clear rules under other sections.	
	Water is a life requisite. If water quantity and quality are to be maintained or, where necessary, improved, then a reliable method of monitoring of those values will be required. This function could easily be linked to landscape unit plans (usually watershed-based) by placing a water monitoring station on the stream at its exit from a landscape unit. Initially such monitoring stations	Northwest Natural Resources Network, Sybille Haeussler, et al, Smithers, BC, June 12, 2002

	might be applied only where the RAPs were approved. The proposed RBC talks around aquatic ecosystems with references to fish habitat and water quality but seems reluctant to acknowledge that aquatic ecosystems could be impacted by forest practices. Consistent with the governments' intent that forest practic3es under the new RBC not diminish the condition of the environment we might assume that aquatic ecosystems would be monitored to detect undesirable impacts and promptly initiate mitigative action. Such monitoring could be based on Benthic Indicators of Biological Integrity (BIBI) or similar indicator models	
	Meeting Community Watershed objectives at the intake provides a good test although a temporal measure would also be useful. If water quality objectives are not met for a short time, as happens with natural events, is there an issue?	WFP, Summary of Operational Comments, p. 18
	A review should be carried out provincially of the watershed that are currently designated as community watersheds and the ones not meeting the intent of the community watershed designation should have the designation removed Setting objectives for and measuring water quality, quantity, cumulative impacts and timing of flow will be a difficult task The downstream extent of notifications associated with community watersheds must be specified Eventually every stream flows into one that has significant fisheries values. Some parameters will have to be developed around this (i.e. distance to a stream with significant fish values)	West Fraser Mills, Dave Ripmeester, RPF and Doug Witala, RPF, June 12, 2002
	The section on exemptions is very confusing, stating that "felling only may occur..." for a number of purposes that specify removal of trees, which implies felling and yarding, or is the intent to fall and leave trees within a road right-of-way at stream crossings, etc.? Felling sounds like a recipe for a bark beetle epidemic	Randy Waterhous, Pope & Talbot, June 28, 2002

	Cattle must be excluded from Community Watersheds. #7 states that livestock use should not result in fecal deposits, vegetation trampling, deposition of sediments, or exposure of mineral soil in riparian areas. experience in that's what exactly is happening Cattle tend to congregate in riparian areas due to the availability of water, lush grasses and palatable shrubs, and will continue to do so naturally unless excluded using expensive fencing. only other option is to exclude them from community watersheds	Lyle LeClair, RPF, Pope & Talbot, June 28, 2002
	There should be NO road development, logging, or mining within watersheds designated as COMMUNITY WATERSHEDS. Water is the most precious resource on earth, and where people depend on water for consumption, water should be the primary resource, with no industrial activity permitted within that watershed.	Fred Philpott, RPF, May 14, 2002

6.2.12 Riparian management under the Results Based Code

The proposed results-based code sets out numerous results and rules intended to avoid harmful impacts to riparian areas from forest and range activities. Of note, the results require conservation of the diversity and productivity of wildlife habitat, including ecosystem connectivity. As well, the rules require that forest practices comply with riparian reserve zone and management zone widths, consistent with the current Code's provisions.

Of note, the discussion paper companion document "Comparison of Value Management Regimes" indicates that the risk to riparian values under the results-based code's riparian management regime is possibly higher than under the current Code, "as government will not be approving retention measures and will rely on inspections to identify failure to achieve required results."[1]

Concerns

The Council of Haida Nations and other respondents comment that the goal statement for riparian management ignores the importance of riparian areas to terrestrial ecosystems. The Council says "The importance of riparian areas is not limited to maintaining aquatic ecosystem functioning, but also includes 'water's influence on the land,' or maintaining the functioning of terrestrial ecosystems."[2]

The Council of Haida Nations also comment that "the rules are unclear as to whether riparian reserve zone and management zone requirements will adequately protect small, non-fish bearing streams. These small streams need to be adequately protected because their characteristics are responsible for the characteristics of large fish-bearing streams.[3]

Environmental groups, including the Sierra Legal Defence Fund and Forest Watch, and West Coast Environmental Law, agree and state that riparian reserve zones on small streams are especially important given the Department of Fisheries and Oceans's view that management of small streams under the existing Code does not provide the level of protection necessary to comply with the *Fisheries Act*.[4]

The Residents of Queens Bay and the Kootenays note that the results-based code does not provide results for riparian management that are clear and measurable. "For example: 'a management zone that protects the integrity of a reserve zone', and 'sufficient streamside tree retention for temperature sensitive streams'. How does one measure the integrity of a reserve zone, or the capability of a management zone to protect it? What is 'sufficient'"?[5]

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[1] Results-Based Forest and Range Practices Regime: Companion Document 1 – Comparison of Value Management Regimes, p. 5.

[2] Council of Haida Nations submission, p. 12.

[3] Council of Haida Nations submission, p. 12.

[4] SLDF and Forest Watch submission, p. 17, and WCEL submission, p. 57.

[5] Queens Bay Residents Association, East Kootenay Environmental Society, Kootenay Centre for Forestry Alternatives submission, p. 4-5.

COFI raises concerns that the riparian management regime is much worse for industry than the existing Code. For example, there is a new requirement to conserve wildlife habitat including ecosystem connectivity. As well, requirements from the Riparian Management Area Guidebook have been converted to legislation, which will increase industry costs and reduce timber supply. COFI found that the riparian regime contains overlapping and duplicating rules that create confusion and provide no opportunity for decision makers to consider socio-economic implications of options. COFI believes that the government's ability to measure and enforce this regime, as written, is questionable.[6]

Lignum agrees that the results for riparian management are very problematic as written: "Result 1calls for the "maintenance of the integrity of stream channels, banks, and gully side walls and natural bed-load dynamics". This does not recognize that natural forces continually reshape and modify these characteristics. How will the effect of natural forces be taken into consideration in any monitoring, or compliance and enforcement regime?"[7]

Lignum also comments that the rules and exemptions in the riparian management section of the discussion paper are not necessary – "all of these could be treated more efficiently by requiring licensees to propose certain measures in the RDP, for district manager approval."[8]

WCEL observes that: "there appears to be no legal requirement to identify, classify and map streams and other hydrologic features. Without this information, and information about the location of cutblocks and roads in relation to hydrologic features, it is not clear how meaningful consultation can occur, nor how a statutory decision-maker can satisfy him or herself with regard to RDP Tests #1 and 4. Furthermore, if such assessments are not completed before logging and road-building occur, it may be very difficult in an after-the-fact enforcement process to prove, for example, that a stream that has been heavily impacted was once a fish-bearing stream."[9]

Alternatives

Colin Buss, a professional forester, says "Riparian management is a bright light in the Code. If not for the riparian guidebook a lot of the positive environmental impact of the Code would not have occurred. In the area where I work the land is low-lying and riddled with fish streams – riparian reserves account for over 75% of the stand level biodiversity. I recommend we maintain the legislative force of the riparian management guidebook."[10]

WCEL recommends that completion of stream classification and assessments be legally required, and that assessments and resulting maps/recommendations be made publicly available (regardless of whether government approval must be sought).[11]

The Forest Caucus of BCEN recommends that the results-based code require, at a minimum, "riparian reserve zones on Class S4 streams and Class S5 and S6 fish-stream tributaries to facilitate compliance with the federal *Fisheries Act* (i.e., at a minimum, convert existing management zone widths to reserve zones with 100% retention).[12]

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[6] COFI, Comments on Discussion Paper, p. 75-78.

[7] Lignum submission, p. 26.

[8] Lignum submission, p. 26.

[9] WCEL submission, p. 56-57.

[10] Colin Buss submission, p. 4.

[11] WCEL submission, p. 58.

COFI says the riparian management regime "should be simplified to reduce overlap and duplication within the regime, with other regimes, and with other legislation (e.g., the *Fisheries Act*).[13]

Seven professional geomorphologists from the MOF recommend that the discussion paper be redrafted and resubmitted for public review after ensuring that goals are clear and that results are enforceable with careful consideration of their technical implications.[14]

Analysis

There is a significant amount of concern among respondents to the discussion paper that riparian management results are not measurable or enforceable. The government should consider redrafting the results for riparian management to ensure they are measurable and enforceable, and resubmitting the revised results for further public and stakeholder review.

It is important to clarify, in response to comments of the SLDF/Forest Watch and WCEL, that the Government responded to the DFO's concerns about the current Code's treatment of small streams in 2001 by conducting a joint audit (involving the MOF, the MWLAP, the DFO, and the forest industry) of the effectiveness of Code riparian practices on small streams in the province's interior. The audit found that riparian practices were generally consistent with Code objectives and that the Code's objectives for small streams were effective in minimizing impacts to stream channels and fish habitat.[15]

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[12] Forest Caucus of BCEN submission, p. 2.

[13] COFI, Comments on Discussion Paper, p. 75.

[14] Giles, Hudson, Millard, Schwab, Teti, Wilford, and Winkler submission, p. 4.

[15] Chatwin et al, *Assessment of the Condition of Small Fish-bearing Streams in the Central Interior Plateau of B.C. in Response to Riparian Practices implemented under the Forest Practices Code (2001)*, p. 45.

6.2.13 Ungulate Winter Range

Results Based Code	Summary of Submission	Stakeholder
Goal Statement *Forest cover and forage will be conserved over an area necessary for winter survival of ungulate species, recognizing regional variance in the ecology of ungulate species.*	This section of the Discussion Paper defers to future objectives set by government. It claims to specify a result, but since the required maintenance of forage and cover attributes is "as specified by the Ungulate Winter Range objectives, or interim objectives..." the result is to follow objectives to be developed at some time in the future.	West Coast Environmental Law, p. 59
	Boundaries are to be set by WLAP, objectives are to be set by WLAP and MSRM; and all monitored by the MOF. The model of having three separate Ministries engaged in setting boundaries and objectives while having a third Ministry, not involved in setting the boundaries and objectives, monitor their application and approve activities that involve the achievement of the objectives with no coordination mechanism is ineffective and inefficient.	COFI, Final Comments paper, p. 79
Result *Forest and range practices will maintain forage and cover attributes necessary for winter survival of ungulate species as specified by Ungulate Winter Range objectives, or interim objectives, set by government.* *Government may enter into agreements with licensees to use information from their plans as the basis for these objectives.*	This is confusing. It is not clear how the MOF can approve a RDP when information from the RDP is to be used for setting objectives that will be used to adjudicate whether or not the MOF will approve the RDP.	COFI, Final Comments paper, p. 79
	A results based code must have a base [of information] to measure results from... we see no reference to required inventories in the document. We have worked with industry in their innovative forest program under which all information in the forest was gathered before the cut was adjusted. Are we to believe this is the case here? If we are [shifting responsibilities to industry]... then we need, at a minimum, credible inventories for wildlife populations...	BC Wildlife Federation, p. 4
	At the present time, there is no way of evaluating whether the result will be effective until we see the objectives "set by government". Clear measurable results must be specified. The Discussion Paper also proposes that government be able to enter into "agreements with licensees to use information from their plans as the basis for these objectives." It's not clear which plans these are. Not the Resource Development Permit, as it's not	West Coast Environmental Law, p. 60

	required to contain any information concerning Ungulate Winter Range. So the government will not require planning, and will not tell Licensees how to do planning. If a licensee chooses to prepare a plan, that plan can form the basis for the "results" that will be binding on the Licensee. We question whether this is an appropriate approach.	
Resource Development Permit Test *Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with land use objectives or interim objectives established by WLAP for areas specified as Ungulate Winter Range by WLAP.* • *The test will apply against landscape scale location and retention parameters established by WLAP.* • *Interim objectives will be consistent with current agreements between MOF and WLAP on timber supply and biological need*	There is no reference to objectives that may be set by MSRM. The model of having two separate Ministries engaged in setting boundaries and objectives while having a third Ministry, not involved in setting the boundaries and objectives, monitor their application and approve activities that involve the achievement of the objectives with no coordination mechanism is ineffective and inefficient. It is not clear what the "current agreements" on timber supply are.	COFI, Final Comments paper, p. 79/80
Statutory Power *WLAP will designate Ungulate Winter Ranges and set objectives, including interim objectives. Some Ungulate Winter Ranges may be managed through objectives set by MSRM*	The model of having two separate Ministries engaged in setting boundaries and objectives while having a third Ministry, not involved in setting the boundaries and objectives, monitor their application and approve activities that involve the achievement of the objectives with no coordination mechanism is ineffective and inefficient.	COFI, Final Comments paper, p. 80
	The Federation has concerns that their interests will not be met if statutory decision making rests in the hands of the MoF alone, based on experience that DM's can protect our values if they are inclined, but most lean toward harvesting and supporting industry. There needs to be a second sober thought on some of these issues and MSRM can provide that in a planning process and MWLAP can provide it better for fish, wildlife and habitat.	BC Wildlife Federation, p. 6

	The government has indicated that they want the RBC to have clear lines of authority; hence there will be no joint approvals. However, in the discussion of statutory powers around the management of UWR's it states that WLAP will be responsible for designating UWR's and setting objectives, then goes on to say that MSRM will set objectives for some UWR's. This is not a clear division of responsibility and accountability – under what circumstances should MSRM establish objectives for UWR's? WALP has the biological staff and line responsibility for management of ungulates.	(reference)
	Most other provisions in the Discussion Paper are very clear on who the decision maker is. Ungulate winter range areas and objectives must be set by the habitat experts in MWLAP. The status quo in UWR management is not satisfactory due to the high discrepancies across the province. Critical winter range is being logged in forest districts that have resisted proper UWR management. The status quo is not scientifically defensible. Given the government's insistence that there be only one identified and responsible decision maker in other contexts, it is surprising to see the Discussion Paper proposing that both WLAP and MSRM play a role in designated UWR. No justification is provided for why MSRM should exercise decision making on ungulate winter range. The only way to correct these contradictions and anomalies in a consistent manner is to have the experts in MWLAP identify critical winter range. Due to urgency in some districts where ungulate winter range still has not been identified (even though other districts have had it in place for decades), there must be provision for immediate protection measures, similar to the proxy measures for old forest retention.	West Coast Environmental Law, p. 60
General Comments	These are generally landscape level issues. To ensure due consideration for balance of social, economic and environmental issues MWLAP should only recommend the location of these set-asides. MSRM, the ministry charged with balancing the three-legged stool, should be the ministry which decides to establish these areas or not.	WFP, Summary of Operational Comments, p. 20
	Under Section 69 of the FPC these UWR's have to be "confirmed before October 15, 2003" or they will not be legally protected from harvesting. The	Doug Morrison, RPF, p. 6

	new RBC will come into effect prior to that date, and if the UWR's are not legally confirmed then a licensee could apply for and get approval for a "development unit" in a RDP that overlaps an UWR. Hence the winter range habitat, which consists of stands normally in excess of 250 to 300 years of age in the moderate and deep snow zones of the coastal environment, could be lost. To avoid this problem the RBC should include a transition clause for interim ungulate winter range management that would provide legal protection for any UWR that is currently recognized in the Memorandum of Understanding between MOELP and MOF because it was legally recognized in the TSR 1 process.	
	Government designations of UWR are a legitimate tool of public wildlife management programs, but the results of wildlife conservation practices by forest tenure holders must be measured in objective terms. Such terms should focus on census data, hunting kill data, forage and cover attributes, and other objective parameters.	Consulting Foresters of BC, p. 4
	Most, if not all, of the province is covered by Broad Ecosystem Unit (BEU) mapping which can serve as a coarse filter to identify areas of high wildlife habitat values. Identified high value areas should be given highest priority for further detailed ecosystem mapping such as TEM or PEM. Where adequate TEM or PEM exists, maintenance of selected high value ecosystems at TEM scale could be incorporated as one objective of a Results Based Code lending functional support to protection of species at risk and maintaining ungulate winter ranges. Ungulate winter range should be maintained not just to ensure the survival of the species to ensure maintenance of healthy local populations	Northwest Natural Resources Network, p. 25

6.2.14 Identified Wildlife

Results Based Code	Summary of Submission	Stakeholder
Goal Statement *Through the provincial identified wildlife management strategy, species at risk will be protected from further loss, extirpation or extinction that may result from forest and range practices*	The value Identified Wildlife has a goal statement about forest practices maintaining the attributes needed to maintain the wildlife. One could easily only monitor the habitat attributes only, and assume that if those attributes are there the wildlife will be okay. But this requires perfect knowledge of the all the habitat requirements and population dynamics of the species in question. Therefore, it will also be necessary to monitor the wildlife in question also to determine if the real goal is being met, which is the maintenance of the wildlife species. This argument indicates that there needs to be two levels of monitoring, of the results and of the goals. The second level will then be used to feed back into the results to adjust them if they are not appropriate to attain the goals.	Adrian de Groot, June 14, 2002
	Strongly recommend the "further loss" wording be removed from the Goal Statement. The Result paragraph should state it more appropriately as "necessary for maintenance of a viable population".	Western Forest Products, Summary of Operational Comments, p. 20
	Unsatisfactory in that it specifies a strategy (the province's IWMS) that is intended to meet a goal as part of the goal statement. The IWMS has failed to protect many identified species, such as spotted owls and marbled murrelet. Critical habitat for the sol-called "higher-level plan" species often remains unprotected due to feared impacts on the timber supply. Missed at the IWMS level, higher level plans have also failed to deliver on habitat protection from many of these species. We hope that IW will receive a higher level of attention under the new Code.	West Coast Environmental Law, p. 59.
	A results based code must have a base to measure the results from. That seems to us to be self-evident but we see no reference to required inventories in the document.	BC Wildlife Federation, p. 4
Result *In carrying out forest and range practices, licensees must maintain ecosystem*	Is "interior habitat in old growth stands" included in the definition of "...ecosystem attribute.."? Interior habitat conditions are required by species such as the red listed Marbled Murrelet for successful nesting, hence it is important to know what is or is not included in "ecosystem attributes". Also the Results statement is deficient in that	Doug Morrison, RPF, p. 7

attributes necessary for the survival of identified wildlife.	it does not make reference to having to maintain an adequate supply, including contiguous area of old growth, with suitable habitat attributes for identified wildlife species.	
	This is much more restrictive than the existing Code as it is not specific to a WHA - it is applicable to all lands. The existing Code requires management activities as specified in a approved WHA or GWM for species identified in the IWMS- not a universal application of management for "attributes" for the survival of all identified wildlife. It is impossible to achieve this result, we do not even know what these attributes are for all species. Some attributes may not be entirely within the control of licensees. The existing Code has a 1% cap on timber supply determined in TSR1 to reflect socio-economic priorities. It is not clear how socio- economic priorities can be addressed in this model.	COFI, Final Comments paper, June 28, 2002, p. 80
	The result specified in the Discussion Paper is a good general statement, akin to what we have proposed should be included as "overarching results". No technical or planning results are proposed, however. This could make it difficult to enforce in all but the clearest cases.	West Coast Environmental Law, p. 60.
Rule *The legislation governing forest and range practices will require the licensee to comply with general wildlife measures for a wildlife habitat area or specified ecosystem unit*	UWR objectives or interim objectives have never been clearly stated by MoE, now MWLAP. Target for UWR areas (ha) on Vncouve4r Island are often based on historic ungulate population that existed prior to the explosion of the wolf population in the mid-70's and do not reflect the reality of the current ungulate population. The amount of habitat required should reflect current population status.	Western Forest Products, Summary of Operational Comments, p. 20
	This is a redundant statement.	COFI, Final Comments paper, June 28, 2002, p. 80
	The rule provided focuses on general wildlife measures which government will set in relation to a wildlife habitat area or specified ecosystem unit. This will be a useful tool and an appropriate way to set stringent rules where a particular species has been recognized as in need of protection. However, this tool should not replace	West Coast Environmental Law, p. 60.

	specific rules designed to protect endangered and identified species generally.	
Cross reference: *See RDP Approval Test #2 under Section 5.3.* *Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with objectives established by WLAP for species at risk that are designated by WLAP as identified wildlife. Zones will identify wildlife habitat areas, or ecosystem units where general wildlife measures apply. The objectives or general wildlife measures established for these areas, will constitute landscape level objectives for the purpose of Test #3*		
Statutory Powers *WLAP will be the agency charged with designating a species at risk as identified wildlife and establishing wildlife habitat areas, specified ecosystem units and general wildlife measures. In addition, some identified wildlife, as well as other important wildlife species, may be protected through other land use objectives established by MSRM. Government may enter into agreements with licensees to use licensee information as the basis for these objectives.* *A statutory power of intervention will allow government to intervene if there is*	In the last paragraph in this section what is intended by the term "intervene"? Does it mean that someone will be empowered to cancel an Approved RDP or development unit (i.e. prevent harvesting or road construction) if a proposed "alternate strategy" is recognized as having a significant risk of not achieving the result required?	Doug Morrison, RPF, p. 7
	The model of having two separate Ministries engaged in setting boundaries and objectives while having a third Ministry, not involved in setting the boundaries and objectives, monitor their application and approve activities that involve the achievement of the objectives without a coordinating mechanism is ineffective and inefficient. This does not seem to make much sense. How can the MOF approve a RDP when information from the RDP is to be used for setting objectives that will be used to adjudicate whether or not the MOF will approve the RDP? Designation should be accomplished through an inclusive process that takes industry priorities and needs into account.	COFI, Final Comments paper, June 28, 2002, p. 81

a significant risk that the result for identified wildlife will not be achieved by the alternate strategy	Without clear direction to THLB cumulative impacts, WLAP and MSRM will continue to pursue individual agendas and not consider the cumulative affects of their decisions on AAC. History over the last 10 years substantiates this position.	Western Forest Products, Summary of Operational Comments, p. 20
Exemption *A statutory power will authorize a WLAP designate to exempt a licensee from the rule*	Requiring this exemption to be approved by a non-MOF decision-maker increases complexity, and may increase information requirements and slow down decisions. This is not consistent with the objective to reduce Code complexity. The use of ad hoc exemptions to hard wired "one size fits all" rules and results is complex and resource intensive. It is unclear what tree modification means in this context; it is possible that acts as simple as marking boundary trees could be affected. It is unclear how an exemption would be granted.	COFI, Final Comments paper, June 28, 2002, p. 81/82
	Under what conditions would this exemption authority be used? This clause is risky unless clearly defined. What pressures will this authorization result in being brought to bear on the WLAP designate to issue an exemption?	Doug Morrison, RPF, p. 7
General Comments	While the proposed results and rules are good as far as they go, we would propose additional requirements aimed at providing more enforceable protection for wildlife outside of wildlife habitat areas, including: • requirements that a survey of the wildlife and habitat attributes be made prior to approving operations in a development unit; and • that any evidence of the presence of an identified species in or near a development unit be immediately communicated to the MWLAP. We would further recommend that the Ministry of Water, Land and Air Protection be given a general power to review proposed or current logging plans, to issue stop work orders, and to make such general orders as may be necessary to protect identified wildlife. Finally, we urge government to eliminate the 1% timber supply impact cap policy for implementing the IDWMS. To the extent that it is not explicitly mentioned in the Discussion Paper, we hope that this is what is being proposed.	West Coast Environmental Law, p. 60.

	The limit on the amount of habitat under the identified wildlife species account is currently set at a 1% impact on the AAC. This is an unrealistically low target to accomplish successful management of all identified wildlife that depends on old growth or more advanced mature stands of timber for survival	Doug Morrison, RPF, p. 7
	Most, if not all, of the province is covered by Broad Ecosystem Unit (BEU) mapping which can serve as a coarse filter to identify areas of high wildlife habitat values. Identified high value areas should be given highest priority for further detailed ecosystem mapping such as TEM or PEM. Where adequate TEM or PEM exists, maintenance of selected high value ecosystems at TEM scale could be incorporated as one objective of a Results Based Code lending functional support to protection of species at risk and maintaining ungulate winter ranges. Ungulate winter range should be maintained not just to ensure the survival of the species to ensure maintenance of healthy local populations.	Northwest Natural Resources Network, June 12, 2002, p. 25
	Similarly for section 6.2.14 (identified wildlife), the general wildlife measures need to be clearly prescribed (and agreed by all parties) or there will be potential for ongoing dispute over the adequacy of measures and outcomes. We have mechanisms in place in Tasmania to ensure that wildlife measures are developed and signed off by both a scientific committee and a stakeholder committee. This encourages all parties to work towards outcomes that are an acceptable balance between the science and the practicality/cost-effectiveness. I also think that the goal statement may be too legally restrictive in prescribing that species at risk will be "protected from further loss". We tend to prescribe "no long term net loss" or that species at risk will be protected from "a deterioration in their conservation status" to reflect the (often) dynamic ecological relationship between forest management practices and species abundance.	Graham Wilkinson, Chief Forest Practices Officer, Tasmania, p. 3
	Agree with the intent of this section, in regard to species that are genuinely (as opposed to locally) at risk, but are concerned that there is too little consideration given for the impacts on other species due to heroic measures applied to "identified wildlife" species In short, while theoretically addressing "biodiversity" by attempting to protect a singe species, it may distract attention from the more important focus on the rest of the ecosystem involved.	BC Trappers Association, June 15, 2002, p. 8

Comments on the Draft Legislation in Appendix 4	Meeting the objectives *and* complying with the general wildlife measures are both required; a choice between these two should not be available. Also the term "in accordance with" is inappropriate. To meet the intentions of a results-based code the term "in compliance with" should be substituted.	Dr. Paul Wood, June 5th, p. 1
	We also note that s. 3(a) of the draft legislation appears to contemplate that a general wildlife measure could be designated in respect of a species generally, and not linked to a particular wildlife area. However, no provision is made to make such a designation binding on a Licensee.	West Coast Environmental Law, p. 60.
	Very real danger that landscape level habitat consideration for all other wildlife will continue to be primarily by default. Most Identified wildlife species are so listed because of perceived rarity, and may therefore be more important politically than they are ecologically or economically. In terms of sustaining biodiversity and important wildlife populations such as certain furbearers, the "values" involving structural features of forests (old growth, seral representation, CWD, wildlife trees, etc.) are useful only to the extent that they are direct specifically and explicitly to locally definable species or ecosystem objectives. At a minimum, a separate wildlife category of "Featured Wildlife" and/or "Locally Specified Wildlife" needs to be prominently listed as a "Value" in App.1 (WLAP as a lead agency), with the expectation that determining the species or species groups pertaining in each local situation would be aroutine part of the preparation for an RDP application.	BC Trappers Association, June 15, 2002, p. 10

6.2.15 Resource Features

Results Based Code	Summary of Submission	Stakeholder
Goal Statement *Forest and range practices will protect resource features.*	This result and rule are more restrictive than the existing Code. The definition of resource features may change (see Comparison of Value Management Regimes Companion Document) creating even more costs. Industry liability is significantly increased and the information requirements may result in cost increases.	COFI, Final Comments report, p. 82
	What constitutes a resource feature is not explicit. The impact of this section will depend on what will be considered a resource feature. The current approach leaves few options. If it is a resource feature then we need to protect it regardless of its frequency, condition, or quality.	Western Forest Products, Summary of Operational Comments, p. 20
	This section of the proposed Results-Based Code framework contains positive concepts, but the language is open-ended. The phrases "will protect" in the Goal Statement, and "will not result in damage" in the results could be interpreted as setting a very high bar (i.e., full protection and a zero threshold for damage), which we would wholeheartedly support; however, without definitions, there is no guarantee that they will be interpreted this way.	West Coast Environmental Law, p. 62
Results *Forest and range practices will not result in damage to resource features.*	This is an absolute result that is virtually impossible to achieve. Accidental damage may occur, especially since these features can be difficult to recognize until timber harvesting has begun. It is worse than the existing Code.	COFI, Final Comments report, p. 82
	Extremely vague wording makes it impossible for the public to know if this result is adequate. What is the definition of a resource feature? Can it be anything that is not covered directly in the RBC? Is there a process for designating resource features? Is there a place for public involvement in that process? Is abiding by the rule (documenting a reporting) considered sufficient to achieve the result? Is the licensee responsible for damage it caused to a resource feature it failed to document and report up front?	Sierra Club of BC, p. 3

	Furthermore, because of the after-the-fact nature of a Results-Based Code, in effect the language "will not result in" will put the onus on the body enforcing this result to prove that a licensee's action "will" result in damage to resource features. Instead, in the face of scientific or technical uncertainty, the precautionary principle would suggest that the onus should be reversed, and that the action should not proceed in the first place if there is uncertainty as to whether it will cause damage.	West Coast Environmental Law, p. 62
Rules *Forest and range licensees must document and report the location of resource features and actions taken to protect them*	I am not sure how well your resource features are documented. If there is nothing known will there be an expectation that licensees will have to undertake assessments and compile inventories? This may need to be clarified.	Graham Wilkinson, Chief Forest Practices Officer, Tasmania, p. 3
	The single rule for this section is symptomatic of the least effective aspects of the proposed RBC framework, in that both the level of protection, and the actions to protect resource features are left almost completely up to the licensee. To further add to concerns about this section, it also gives the District Manager complete discretion to exempt licensees from having to protect certain resource features at all! It is positive that government officials will have the authority to identify other resource features, however, this opportunity should also be open to First Nations, and concerned citizens through a public participation process. Such identification must trigger an obligation to avoid any harmful alteration to the feature. Clarify that the definition of resource features is as per the existing Code and Operational Planning Regulation definitions, or if it is being altered, seek public input on the alteration. In relation to the proposed result, define "damage to" to include any alteration to the feature's natural or original state that affects its ecological or cultural value to users.	West Coast Environmental Law, p. 62
	In combination with the other information requirements in this regime, this could increase costs for industry. It is not clear for what reason this information is being requested, when it would be required or with what frequency.	COFI, Final Comments report, p. 82

Statutory Power *Government officials will have authority to identify other resource features*	Forestry interests must be taken into account in this process	COFI, Final Comments report, p. 82
Exemption *The District Manager may exempt, with conditions, a licensee from having to achieve the result for a specific feature*	The use of ad hoc exemptions to hard-wired one size fits all rules and results is complex and resource intensive.	COFI, Final Comments report, p. 82
	Delete the exemption. With the level and type of protection already completely open, having such an exemption is excessive. Furthermore, if the Code framework must contain exemptions at all, it must carefully specify conditions under which each exemption may be permissible.	West Coast Environmental Law, p. 62
General Comments	[On the lack of recreation in the RBC, and reviewing…] Resource Features, and note the emphasis on identifying and not damaging them. Fact is, we don't always need to protect them, that is a job need to exploit them! And I see Section 18 in Companion Document 1 on management of access to crown land for recreational use. If I have missed a specific recreation resources section, stop me now!	Jeremy Webb, RRL, p. 6

6.2.16 Cultural Heritage Resources

Results Based Code	Summary of Submission	Stakeholder
Goal Statement Cultural heritage resources will be identified and appropriate management mechanisms established before forest or range practices may impact cultural heritage resources	This Goal Statement is empty of meaningful content; it contains no guidance as to expected management goals for cultural heritage resources. Furthermore, it indicates that impacts, presumably even destruction of cultural heritage resources is expected and acceptable. In addition, with the exception of archaeological sites the proposed framework provides no assurance that there will be any protection at all for cultural heritage resources (i.e., it is not obvious what legislation is being referred to . certainly no details are given in the Discussion Paper . and there does not appear to be any obligation on DM's to prepare written guidelines). Develop legally required protections for identification and protection for cultural heritage resources in conjunction with BC First Nations.	West Coast Environmental Law, p. 62
	The new RBC contains no requirement to conduct AIA's. The identification of cultural heritage resources is the responsibility of the licensee under the new RBC. This is unacceptable and places the possibility of infringement of aboriginal rights into the hands of the licensees.	Cowichan Tribes, p. 2
	We note this section of the document only refers to archaeological sites. There are no provisions for traditional use sites, spiritual sites or other culturally sensitive sites or resource/values. These sites, features and resource must be managed in accordance with the direction of the respective First nations whose territories these sites, features and resources are located. Furthermore, we contend that in many circumstances the *Heritage Conservation Act* fails to meaningfully address First Nations management interests in the identified sites, features and resources and must be amended to include options for First Nations to provide specific management objectives and/or requirements for licensees accommodation.	Ditidaht Huu-ay-aht Shared Territory Board, p. 12

	This result regime is potentially worse for the industry than the existing Code, additional legislation relating to CHR's will likely reduce flexibility and increase costs.	COFI, Final Comments paper, p. 83
Result The resource is to be managed in accordance with the Heritage Conservation Act where the resource is an archaeological site The resource is to be managed in accordance with the legislation or with written direction from the District Manager if it is not an archaeological site	Hard to comment on this without knowing what the DM's discretion will be. Regardless, cultural features will continue to have a high level of protection.	WFP, Summary of Operational Comments, p. 29
	Management of cultural and heritage resources is to be done "in accordance with the legislation or with written direction from the district manager." Where cultural and heritage resources refer to First Nations culture and heritage, these resources need to be managed in accordance with the requirements of the appropriate First Nation. Similarly, if culture and heritage resources are those of non-Indigenous people, these resources need to be managed in accordance with the people whose culture and heritage is reflected by these resources.	Council of the Haida Nation, p. 12
	Redundant. Not a result, it merely restates the existing law. Without knowing what the legislation or direction from the DM is, it difficult to say what the impacts will be.	COFI, Final Comments paper, p. 83
General Comments	With no requirement to conduct AIA's aswas the case with the FPC, there appears to be no legal requirement to consider or protect cultural heritage resources prior to forest development activities. Turning the responsibility for identification of cultural heritage resource or potential over to timber licensees is an unacceptable rejection of the government's fiduciary obligations to First Nations, and places the possibility of infringement of aboriginal rights and title squarely in the hands of timber licensees. Timber licensees do not have the expertise, nor should it be their responsibility to recognize cultural resources or potential and manage for them accordingly. There is not sufficient cultural resource information for the Ktunaxa Nation traditional territory upon which to base judgments about potential damage to cultural resources. This information has been collected in the past through AIA's, which will now not be	Ktunaxa Kinbasket Treaty Council, p. 3

	required. First Nations are not prepared to turn over cultural resource information to the timber licensees to be used for forest management planning processes. There are issues of intellectual and cultural property rights and confidentiality which are very sensitive to First Nations. The only stated reference to First Nation values is the need for consultation to "identify risks to forest resource values that will need attention during preparation of an RDP". This is sufficiently vague as to provide no comfort to First Nations, and contains no legal objectives or results prescribed in law, as many other section of the RBC contain. This is clearly setting up the case for an infringement on aboriginal rights.	
	Will licensees have full access to agency and native information on cultural heritage features so that we can incorporate the appropriate actions and consultations into our planning regimes?	West Fraser Mills, Ripmeester/Witala, p. 4
	Criminal sanction for cultural heritage damage is already established by the *Heritage Conservation Act*, and tenure holder will take whatever steps are necessary to avoid contravention. Professional accountability and civil action are other avenues for government and First Nations to pursue remedy if forest practices result in damage to cultural heritage sites or artifacts.	Consulting Foresters of BC, June 20, 2002, p. 4
	The Results Based Code appears to eliminate the precautionary assessments for logging that impacts First Nation's cultural heritage values. There does not seem to be an awareness of the *Heritage Conservation Act* among many people working in forest operations or in MoF itself. How will MoF address the need for education about cultural values, particularly if assessments are not required? The *Heritage Conservation Act* may not be able to fill the gap in the RBC due to potential changes to the *Act* that will result in less protection for cultural sites. How will MoF address these changes so that cultural values will be assessed and protected under the new Code?	Hul'qumi'num Treaty Group, p. 2

6.2.17 Lakeshore Management

Results Based Code	Summary of Submission	Stakeholder
Goal Statement *Fisheries, riparian, aesthetic, recreation and other important social and ecological values will be conserved adjacent to lakes greater than 5 ha.*	It is positive that some protection is provided for lakes; however, there appears to be no rationale for excluding smaller lakes. In the Goal Statement, the words "important" and "conserved" are too open to provide meaningful guidance to managers. Clarify the relationship between 6.2.17 and 6.2.12 "Riparian Management" which also refers to lakes. Include results and rules for lakeshore reserve and management zones in the Results-Based Code legal framework.	West Coast Environmental Law Page 62
	The goal statement may imply that VQO's would apply to all lands visible from a >5ha lake? If so this would, I think, be the majority of THLB potentially constrained. Will the SDM set objectives for every lake or only those with important values? Hard to comment on this without knowing what the objectives will be. Why is an SDM responsible to set objectives for lakes greater than 5 ha? Should this not be part of the landscape unit objectives?	WFP, Summary of Operational Comments, p. 21
	Issue with the 5 ha size; it should be changed. Lakeshores are a priority for all organisms. Change 5 ha to 1 ha.	anonymous
	In much of the province there are few lakes over 5 ha. The minimum size of lakes protected should be reduced to 0.5 ha.	West Kootenay Naturalist's Association, p. 2
	The proposed regime has significantly increased lakeshore management zones with no upper bounds. Two Ministries, MOF for zones less than 200 metres and MSRM for zones greater than 200 metres, will be responsible for establishing objectives. A third Ministry, WLAP may also establish water quality objectives, if a lake happens to be in a community watershed. The result will be reduced access to timber, increased costs and significantly less flexibility to manage for results.	COFI, Final Comments paper, p. 83/84

	The RBC approach to Lakeshore Management does not: • Reduce costs to industry • Provide defined results • Provide freedom to manage to results • Consider economic interests New undefined aesthetic, social and ecological values have been added. The goal statement refers to values to be conserved "adjacent" to lakes, the cross reference refers to LMA while Appendix 1 refers to LMZ. Does the DM have to take into account objectives set by MSRM or WLAP to meet Test#2?	
Results *Where objectives set by an SDM for lakes greater than 5 ha specify stand level retention requirements, forest and range practices will maintain forest cover representation consistent with those objectives*	With regard to the result set, no security whatsoever is provided that lakes will receive any protection at all, because it is contingent on objectives being set by an SDM.	West Coast Environmental Law Page 62
Cross reference *See RDP Test #2 under Section 5.3.* *Prior to issuing an RDP, the District Manager must be satisfied that the RDP is consistent with objectives set by MOF regarding the location and intensity of forest development and range practices within a lakeshore management area*		

General Comments	It is very disappointing that the government has decided that lakes and ponds less than 5 hectares in size do not qualify for the protection that the large lakes receive. On average, the small, less than 5 hectare lakes and ponds are most often more productive than larger lakes, they commonly teem with life and are a critical part of the aquatic ecosystem and should be afforded the same or better protection than large lakes. It should be automatic to leave forest cover in the riparian areas along these important waterways not only for fish but for other animal life. The removal of forest cover around small ponds and lakes is more critical than for larger water bodies because of the potential thermal impact from reduced shade. As well there is a greater chance of disturbance along the shoreline and to the equally small streams that feed into small lakes and ponds.	Jim Culp, June 29, 2002, p. 3/4